

## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.





# ALLEN'S

## *Book of Berries*

for

# 1936

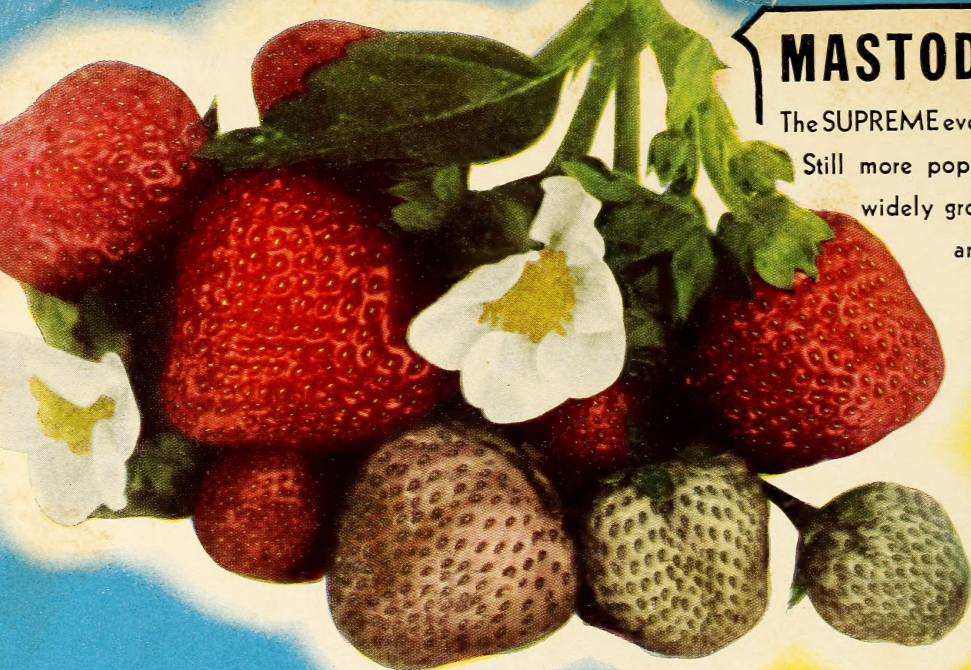


### **FAIRFAX**

Beautiful, glossy berries.  
Finest flavor of all. Very  
large and very firm. Pro-  
ductive and profitable.

The W.F. ALLEN CO., Salisbury, Md





# MASTODON

The SUPREME everbearer.

Still more popular and  
widely grown than  
any other.



## PREMIER

Early. Holds many  
records for yields  
and profits. A sure  
cropper.



# Worth Repeating

So much friendly comment has been received about our Golden Anniversary Berry Book of last year that we are repeating on our cover pages the colored illustrations. We have taken pleasure in presenting these illustrations, not only because of their beauty, but because they are all made from actual photographs of the varieties represented, with coloring matched as faithfully as printing skill could do it. It is gratifying, therefore, to receive letters like that of Mr. A. M. Christner of Piatt Co., Ill., who writes, "How can anyone tell what a variety looks like from the pretty pictures the way those cuts are used interchangeably for several varieties in so many berry books. I have never detected any in your book. Go on with the good work of helpfulness. I think you will get as many orders and perhaps more."

In other ways as well we have tried to make this Salesman of ours render a real service. In addition to the information given under "Common Sense Methods" we have summarized some of the more recent research work that we think is important in growing good crops of strawberries, including Everbearers. You will find this mainly on pages 13 to 15.

As a money crop it is our conviction that a moderate acreage of strawberries will yield larger and more consistent profits than most other crops. Under "Strawberries Pay" on page 4 we discuss the possibilities of strawberries, together with some concrete examples of what has been accomplished. You may find it helpful also to study the suggestions we have made to help you as a strawberry grower to make the most of all the factors under your control.

We believe improvement in strawberry varieties in the future will come from scientific breeding work rather than chance seedlings. Most of our old friends realize that for a good many years we have not offered them any new varieties with our recommendation except after several years of selection, observation and testing. Chief among those we have boosted are Fairfax, Dorsett and Catskill. We expect to continue this service and to advise you promptly when new and better varieties are produced and made available.

Won't you take the time also to read some of the testimonials? You will find these interesting and helpful in reporting where and under what conditions various varieties do well. Not only this but they often contain other information or suggestions which are of value.

We have tried to keep our claims conservative and our statements accurate with a minimum of ballyhoo and exaggeration. This does not mean that we are indifferent to your orders. We want them. We promise you good true to name plants, and we hope our methods and service will make you feel justified in sending your orders to us.

## Echoes from the Golden Anniversary 1935 Berry Book

"—was told it was interesting and that was certainly right."—Mr. Wm. B. Kibbe, Stafford Co., Conn.

"—free from ballyhoo. Won my order because of frankness in giving faults as well as merits of the different varieties."—Mr. Auburn Howell, Bonneville Co., Idaho.

"—If you wanted it back you would have to send me at least \$5. No 'cure-all,' but just good dependable help."—Mr. Ralph Scott, Saint Clair Co., Ill.

"—Appreciate the honesty and accuracy of your catalog. Hope to receive it every year."—Mr. C. W. Cave, Allen Co., Kansas.

"—All the information needed and no waste words; also honesty evident. Think your catalog would be hard to improve."—Mr. A. A. Chase, Barnstable Co., Mass.

"—Your method of issuing a catalog has the rest of them completely trimmed."—Mr. J. D. Hoch, St. Joseph Co., Mich.

"—I like your catalog fine, especially the impartial descriptions. It is the finest berry catalog I have ever received."—Mr. Frank Thurman, Lafayette Co., Mo.

"—I want to say that I appreciate your Annual Book of Berries and would pay \$1 for it rather than do without it."—Mr. Rex Fuller, Lawrence Co., Ohio.

"—Your Golden Anniversary catalog just received makes a record for other nurseries to shoot at. I hope you may continue many more years."—Mr. Charles A. Wyandt, Huron Co., Ohio.

"—The information contained in your 1935 Berry Book is worth many dollars to the beginner as well as to experienced growers."—Mr. W. E. Campbell, Mifflin Co., Pa.

"—Your Golden Anniversary Berry Book is a beauty and very valuable."—Mr. F. E. Paul, Providence Co., R. I.

"—I appreciate your annual Book of Berries. It is of great help to me in my work. When I get stuck and need information on any berry subject I usually find it in the 'old standby.' Many thanks for the useful and beautiful Book of Berries."—Mr. S. C. Fitzpatrick, York Co., Pa.

### Index

Strawberries Pay .....	4-5
Good Plants Are Important.....	6-7
Strawberry Gardens .....	8
Common Sense Methods.....	9-13
Making Everbearers do Their Best..	13
Spacing, Leaf Area, Early Runners..	14-15
Dorsett and Fairfax.....	16-20
Premier and Other Early Varieties..	21-23
Catskill and Other Midseason Varieties .....	24-26
Chesapeake and Other Late Kinds...	27-28
Facts About Everbearing Strawberries .....	29
Everbearing Varieties.....	30-31
Picking the Winners.....	32
Price List of Plants for 1936.....	33
Asparagus Roots.....	34





**CATSKILL**

**FAIRFAX**

**DORSETT**

These Varieties, Grown and Picked Like This, Mean Profit for the Grower

## Strawberries Pay

**Strawberries will pay.** Just how much and how consistently no one can answer. Except in cases of extreme drought, flood or frost we believe good growers almost always make some profit or at least good pay for their work. Good growers are those who have good strawberry land and who make the most of all the factors which are under their control. We do not believe it is too much to expect a profit of around \$200 to \$400 per acre under such conditions. Profits much larger as well as much smaller are possible under varying conditions.

Under average conditions, with good soil, good varieties and proper care, growers can count on from three to ten thousand quarts per acre. From \$100 to \$175 per acre should cover the cost of growing the crop, including plants, land rent, fertilizer, labor hire and fair wages for the growers' time. Cost of crates and picking will vary, but will average about 1½¢ per quart for crates and basket and from 1½¢ to 3¢ per quart for picking. Except in years of extremely low prices these figures seem to leave room for a nice profit.

Here's the record from one of our own fields of Dorsett this year. Acreage 2½. Yield, 15,700 quarts. Gross returns \$1600. That field made us a good profit even though size and total yield were reduced by having the plants badly overcrowded. Figures from our Catskill sales quoted on page 24 were also quite satisfactory.

Mr. Virgil Bogart of Ulster Co., New York, picked 1,055 quarts of berries from 800 plants set, and sold them for an average of 10¢ to 15¢ per quart, which brought him \$116.37. Mr. B. L. Mullins of Roane Co., W. Va., had slightly over one acre of berries fruiting in 1935. They were Premier, Dorsett, Fairfax and Chesapeake. Wrote Mr. Mullins: "I kept no exact record but estimate my crop at 10,000 to 12,000 quarts. I am glad I began growing **strawberries as a side line. Have found it profitable.**" These are not extreme profits made possible by fancy prices, irrigation or other unusually favorable factors. They are results which any grower who makes his plans carefully and carries them out faithfully can hope to equal or excel.

## Making Plans

**1. Have some berries every year.** The most successful strawberry growers keep at it year after year. With berries every year you can get by in bad seasons, make a profit in average years and real money in good years with high prices. Jumping in and out of the game is not good business. Too often this means plenty of berries when prices are low and none when they are high.

**2. No crop shows a profit every year,** but we believe strawberries offer an opportunity for larger and more consistent profits than any other widely grown and easily grown crop. Cotton growers in the south, dairy farmers, poultrymen, stockmen, vegetable growers, and others, might find an acre or two of strawberries highly profitable in connection with their regular line. It is for each grower to decide, but improved varieties and better methods make strawberries a good bet at this time.

**3. Select some of your best land.** You will put relatively a large amount of labor and expect relatively a large return from your strawberries. Do not waste your money and labor on poor land. Give your strawberries some of the best, and give it careful preparation.

**4. Set fancy high-yielding varieties** best suited to your purpose. We have tried to tell you the

honest truth about all our varieties. We have summarized our conclusions on page 32 under "Picking the Winners." It should not be hard for anyone to know what to plant to get the best, and it is this kind that brings the highest prices.

**5. Grow as many as you can handle properly but no more.** The amount of other work you are attempting to do, the amount of land you have available, the locality in which you live, and the methods you intend to use in marketing would all have a bearing on this question. A half acre field on good land, well cared for and handled properly in marketing might well give more profit than twice the acreage poorly cared for.

**6. Get good, dependable, well-rooted, true-to-name plants.** Of course we hope you will get your plants from us, and we believe you will find it profitable to do so, but wherever you purchase, be sure they come up to the standards we have outlined on page 6.

**7. Better methods.** On pages 12-15 we discuss results from saving early runner plants, from spacing or restricting formation of late runners, and from fertilizing to build up a large leaf area per plant in the fall. We believe these things have a definite place in any program of growing berries for profit.





Picking Catskill in the Three-acre Field Which Yielded 32,000 Quarts in 1935

## Picking and Packing

Careful picking can make a thing of beauty out of a quart of fancy strawberries. It can make ordinary berries very salable. Careless picking can reduce the value of fancy berries and make unprofitable less fancy but otherwise marketable berries. Careful picking will pay.

**Avoid green sides and tips** by selecting varieties that ripen evenly and without green tips.

**Have the pickers discard undersized berries** and those which have soft or rotten spots (especially after a heavy rain).

**Dirty or gritty berries** (after rains) can be largely avoided by using a mulch which is even more effective if plants have been spaced so the mulch can be worked down between the plants.

**Berries look best in the package** when the caps are left on and from one-quarter to three-quarters of an inch of stem is left.

**Bruising and mashing berries detract** from their value and can be avoided by careful picking and handling.

**Well-filled packages** not only make the buyer feel that he is getting his money's worth (even at a higher price) but they actually make the berries show up better.

**After being picked berries** should be carried to the packing shed in a relatively short time. One hour's exposure in the hot sunshine will sometimes ruin an otherwise fancy quart of berries.

**In packing,** face the berries **some** if you must but not too much, as a reputation for an honest pack will help you sell on any kind of a market.

**Clean, bright packages will make your fruit** more attractive to the buyer than dirty, soiled packages. Improved types of crates which do not cut and bruise the berries as much are being developed. If available it may pay you to try them out.

## Opportunities

**Part-time jobs** may be profitably rounded out with strawberries. A small acreage can be made to do so much that a minimum of land is necessary. If no land of your own is available perhaps a neighbor would rent you that vacant lot. Fertile land is best and rank weed growth indicates fertile land. Mr. Thomas Weller of Grant Co., Ind., writes, "I made big profits from a small acreage of strawberries in 1935. I expect to plant four city lots next spring in Dorsett and Fairfax."

**Little money is needed** to start a strawberry garden or a small berry business. A few simple tools, a small outlay for fertilizer, and the plants, which were never more reasonable in price than now. Also, strawberries yield quicker returns and bring in money earlier in the season than any other fruit crop.

## Marketing

**Advertise.** Especially for local markets a small ad in your local paper or a sign in front of your farm may bring telephone orders or even farm buyers to your place in such numbers to take your whole crop. We have many reports where this is done. Try to have a fancy, high quality product. If you can, selling will be much easier.

**Roadside Market.** If on or near a well-traveled highway try a roadside market. Many growers are successfully disposing of their crops of strawberries as well as other things by this method. It is surprising how many automobilists like to buy fruits and vegetables right on the farm. On our own roadside market we have many regular customers who drive out from town in the afternoon to buy at the farm. Others traveling through on business or for pleasure notice the market and stop to buy on their return, sometimes days later. Attractive products, especially fruits, will be bought by tourists to enjoy as they travel. Unless you have a market already developed look into the possibility of a roadside market. Like many others, we were amazed at the results from our own, even the first year. Perhaps you will be.

**Hotels and Grocery Stores.** It is an old truth that any produce well grown and well packed is half sold. We have many reports from customers that they dispose of all they can grow to such outlets, much of it being engaged even before it is harvested.

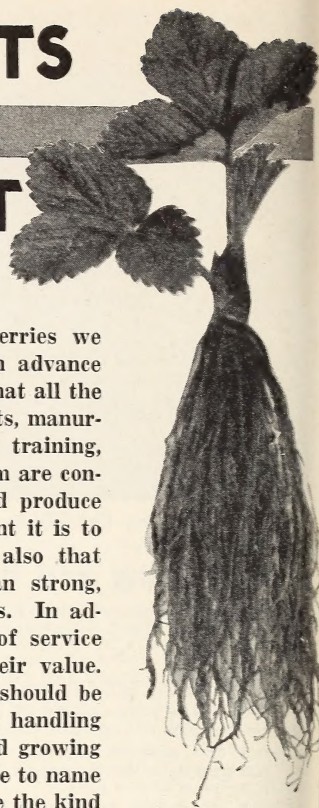
**Wholesale Markets.** If you are well situated from a standpoint of land and labor to grow considerable acreages of strawberries, keep in mind that the motor truck or train will quickly put your berries to the large Wholesale Markets. Even in seasons of low prices, the price range is wide enough so that if you can get top quotations there is almost always margin enough to allow you a fair profit.

**A sample makes a sale.** We are positive that on the roadside market, in a local grocery store, or to the actual consumer, a sample of any product of superior quality will help sell it. This is true even on the wholesale markets. Try it with varieties like Fairfax and Dorsett especially, also with Big Joe, Catskill, Chesapeake and William Belt.

**A brand or label** will help if you are selling in any quantity. Sell only a high grade product under your brand name. We have developed a real demand for our Dorsett, Fairfax and Catskill berries in Philadelphia and New York. They were identified by variety and label and were often sold before the actual shipments arrived.



# GOOD PLANTS ARE IMPORTANT



In producing a crop of strawberries we start sometimes a year or more in advance by selecting and preparing the ground. After that all the operations, including careful setting of the plants, manuring and fertilizing, cultivating, spacing and training, mulching and the other things we do, all of them are concerned with making the plants live, grow and produce the crop. It is easy to see, then, how important it is to start with good plants. It should be noted also that **REALLY GOOD** plants must have more than strong, vigorous crowns and long fibrous healthy roots. In addition to these qualities there is an element of service which can add or detract materially from their value. They should be on hand when needed. They should be properly cleaned and straightened to facilitate handling and they should be packed to reach you in good growing condition. Perhaps above all they should be true to name so that when the crop is produced you will have the kind and quality of berries which you expected. All of these things combine to make

## Fine Planting Stock

**True to Name.** Mixed plants often cause great disappointment and loss. To avoid this they must be kept straight not only in growing but also in digging and shipping. Years of experience are valuable in detecting mixtures when they occur, and in avoiding losses to growers from such mixtures.

**Good Plants.** Healthy crowns and buds and well developed root systems such as our plants have would not be enough unless they were grown in soil where most of the root system could be dug. In heavy clay soils great numbers of roots are broken in digging the plants. You will like the root system of Allen's plants.

**Promptness.** Plants to be of greatest value should reach you when you want them and not after your best planting season has passed. We offer prompt shipment of freshly dug plants. Bad weather may occasionally hold up shipments as much as a week, but normally we can make shipment within a day or two of time specified.

**Protection.** Plants should be kept fresh and moist while digging and handling and not allowed to become dry and withered by exposure to sun and wind.

**Cleaning** dead and decaying leaves and runners helps enable the plants to reach you in good condition. Furthermore, well cleaned

plants, bunched evenly, with roots straightened, make setting easier, quicker and better.

**Grading.** When you buy plants you have a right to expect full count of good plants. Not all the plants in any field, no matter how vigorous and healthy, are good plants. Undersized, poorly rooted, and weak plants must be graded out rigidly. It is here that many plant growers fall down badly. It is in grading and cleaning the plants that a plant grower usually consciously or unconsciously decides whether his standards will be high or low. Of course some varieties like Blakemore, Dorsett, Pearl and Senator Dunlap have smaller plants on the average than Big Joe, Chesapeake, Fairfax and Catskill.

**Packing.** Plants properly packed have the roots between layers of moist sphagnum moss and the tops to the outside of the crate, with bunches firm enough to prevent shaking around, but not tight enough to cause heating. Plants should be packed to reach you in good growing condition—fresh and moist—but not rotten or dried up.

**Price.** There is so little difference in price between the best stock you can buy and the cheapest that it is doubtful economy to buy entirely on price. Those who buy on price only are lawful prey for those who sell on price only. Good plants at reasonable prices are best for everybody.



# Allen's Plants ARE Good Plants

1. They are produced in a soil and climate where strawberries thrive. Climatic conditions favor the growth of strong, vigorous crowns and healthy foliage. The loose sandy loam soil is ideal for the development of a fine, well-developed root system.

2. Fifty-one years of experience guide us in doing all those things which must be done to grow the best plants and to dig and ship them in such a way that they reach you in good growing condition.

3. We are strawberry plant specialists and handle no other nursery crop except Asparagus roots. There are four of us in the business, Mr. W. F. Allen and his three sons, all of whom are full time workers. Under these conditions we can and do give more careful personal supervision which means greater value in the plants we send you. We offer plants that will produce good results for you as they have for others. Let us have your order and we will send you Fine Planting Stock.

## Always Good Plants for 40 Years

Rutland Co., Vt., April 17th, 1935.—Following is a list of strawberry plants that we are ordering. My father ordered plants from you nearly 40 years ago and we have bought more or less from you ever since, and always get good plants.—Mr. Arthur M. Goodnow.

## Always Satisfactory for 35 Years

Ogle Co., Ill., April 22d, 1935.—Have been buying plants from you 35 years. Always satisfactory.—Mr. E. G. Goljenboom.

## Men and Boys

Dearborn Co., Ind., April 19th, 1935.—Please send balance of my order, the 10,000 Mastodon and 25 Haverland. Your 5,000 Fairfax and 2,500 Chesapeake were wonderful plants. The best plants I got for several years. A neighbor of mine bought his plants this year from another nursery. Your Fairfax made his plants look like a small lad compared with a man in size.—Mr. Carl Rumsey.

## Most Thrifty Plants and Extra Count

Berkshire Co., Mass., April 20th, 1935.—My order reached me April 15th. They are the best, most thrifty and have more roots than any strawberry plants I have ever bought. Thanks for extra count.—Mr. C. H. Hennessey.

## Beautiful Plants and Fine Dependable Service

Audrain Co., Mo., April 6th, 1935.—The crate of Fairfax and Dorsett plants received the other day. Beautiful plants in excellent condition. Appreciate your fine dependable service. Also we like your Book of Berries.—Mr. T. J. Rodhouse.

## It Does Interest Us

Morris Co., N. J., April 3d, 1935.—It may interest you to know that I have been buying my strawberry plants from you for several years and I think they are the best plants I can buy. In-

closed you will find my order for 1935. I may need more a little later on.—Mr. George F. Williamson.

## Allen's Better Than Plants from Up State

Ulster Co., N. Y., June 25th, 1935.—The Premier berries we ordered from you last spring were wonderful. We did not lose one plant. After I had sent to you for the plants I also ordered some Premier from upstate as everyone around here discouraged me and laughed at my setting out southern plants. "They just won't grow," they all said. Well your plants did grow and such berries! We made good on them but the upstate berries did not amount to anything. Small plants and small berries. We saw Mr. Underhill's Dorsett and Fairfax berries at Poughkeepsie. Can we get 500 plants of each of these varieties at this late date?—Mr. Myron Van Demark.

## Up to Expectations

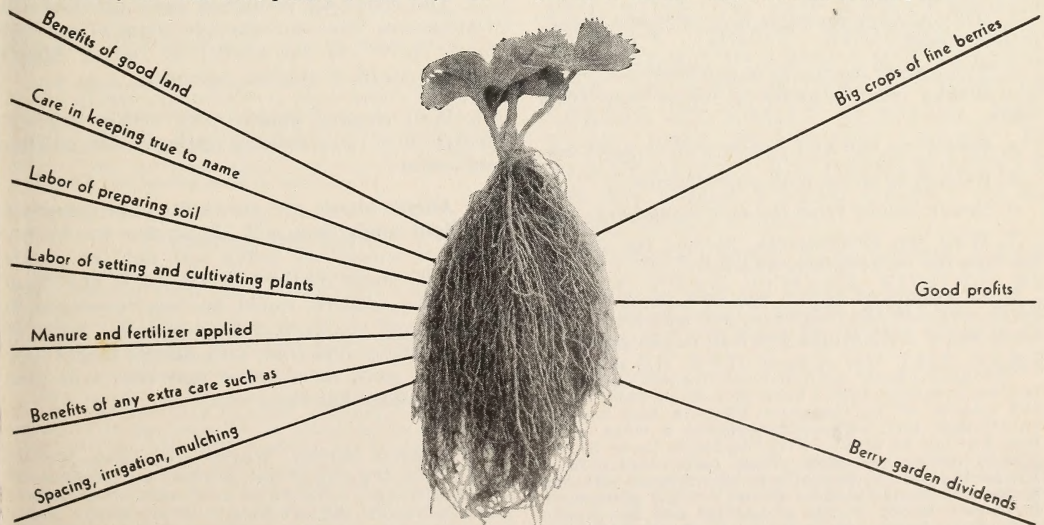
Davidson Co., N. C., March 22d, 1935.—Plants all lived and came up to expectations in every particular.—Mr. H. C. Craver.

## Promptness, Efficiency, Quality

Delaware Co., Ohio, April 9th, 1935.—On the third of this month you received my card requesting delivery of my order at once instead of the 10th, the date set by me for delivery. In less than twenty-four hours from the time you received my rush order my plants were on the way and landed here at noon the 5th in fine shape. I can readily understand how and why you have prospered in your business for 50 years. Here is the answer. Promptness, efficiency and quality. A satisfied customer is your biggest asset. I thank you very much.—Mr. James L. Ward.

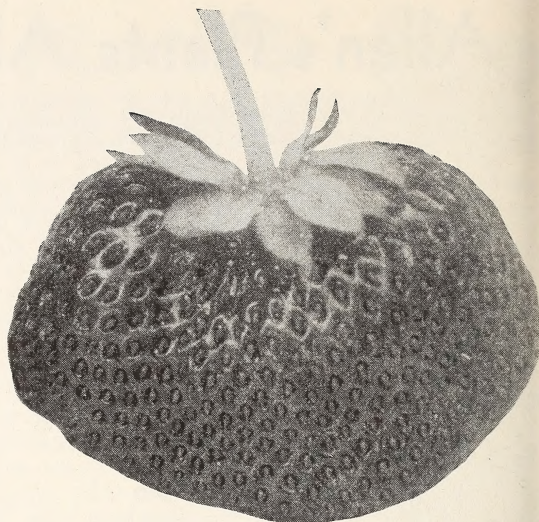
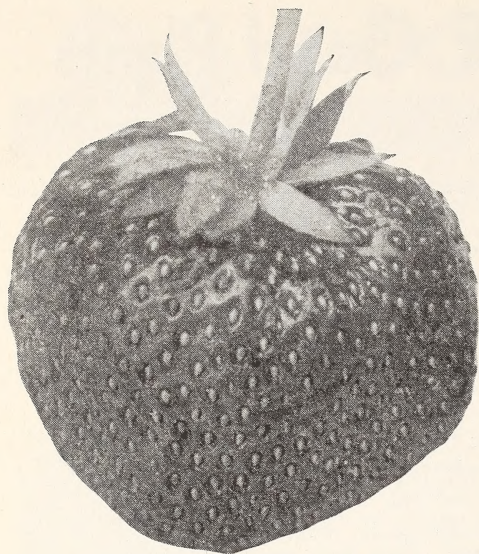
## Proud of Patch from Allen's Plants

Lancaster Co., Pa., July 29th, 1935.—I think I have from your plants the finest looking strawberry patch in this neighborhood. I don't think I have lost ten plants out of the 5,000. I am proud of them.—Mr. Jesse K. Mellinger.



With the same care and attention, much better results are obtained, if you use good plants





Typical Fairfax Berries—DEE-licious

## Strawberry Gardens Yield Pleasure and Profit

Every good garden that will grow vegetable crops should have a few rows of strawberries for home use. The introduction of higher quality varieties like Fairfax, Dorsett, Narcissa, and Southland (for the South), will increase your enjoyment of them fresh off the vines, or at meal time. You will be proud to show them to and share them with your friends. A small amount of expense and effort on a small garden plot of strawberries will be repaid in pleasure and profit many times. 200 plants will make a nice small garden; 500 a fine large garden.

### Berry Garden Dividends

1. Plenty of luscious berries over a long season, right fresh off the vines.
2. All you want for table use, "sugared down," or otherwise.
3. Strawberry shortcake, strawberry ice cream, cool drinks from strawberry juices—and other ways.
4. Berries to can and preserve for winter use.
5. Enough to share with your friends.
6. Ready money from the salable surplus.
7. With the Everbearers, berries for use all through the late summer and fall.
8. As suggested above, the new, high quality berries, Dorsett and Fairfax, will add a touch of royal flavor with which you will be delighted.

"From 50 plants each of your Dorsett and Fairfax set in spring 1934 I have picked up until today 460 quarts of berries and Fairfax has several shortcakes left. The plants made a wide, solid bed, but not so close. Tried to leave three to five plants per square foot. They sold readily from 15¢ to 17¢ per quart while peddlers were offering berries from 8¢ to 12¢. From the 100 plants we have sold \$47.62 worth of berries and have used 160 quarts ourselves."—Mr. H. R. Greene, Middlesex Co., N. J.

## Allen's Plants or Your Own?

By using your own you save the cost of plants and transportation but you lose in other ways.

1. The expense of digging and cleaning your own plants. With inexperienced help and with soil heavy and hard this is quite a task.
2. Every row you dig decreases your own crop. With fair prices expected or thin rows to dig from, this loss counts up fast.
3. The invigorating effects that often come from a change of soil and climate. There is often a marked gain.
4. The convenience of having plants right at hand when you want them.
5. The beneficial results of early planting are well known. You can take advantage of the first "open spell" (in the north) by setting Allen's plants instead of digging your own.

6. Well cleaned plants, with evenly bunched straightened roots making setting easier, quicker and better.

7. Allen's plants are grown for plant purposes in a light sandy loam soil. Many fine strawberry beds are grown on heavy soil but the plants would be short rooted and knotty if dug from such soils. There would be less resistance to drought and mechanical disturbances. Many of our customers find that with Allen's plants they get finer stock at a lower cost that will give better results than their own.

Mr. Aaron Hirsch, Wayne Co., Ohio, writes, "My rows are somewhat broken on account of early drought. We have good soil and market. Your question 'Allen's Plants or My Own?' made me think. I believe it will pay me to buy plants for my own setting."



# COMMON SENSE METHODS

for

## Growing Good Strawberry Crops

### Soil and Climate

Good berry crops are grown in every state in this country as well as in other countries both north and south of us. No one need hesitate to plant strawberries because of climatic conditions.

All soil types are used from fairly heavy clay to light sandy loam. Like most other crops, however, strawberries respond quickly to fertile, well drained soils that are full of humus and retentive of moisture.

Also, experience, though valuable, is not necessary. Common sense methods enable even the beginner to grow strawberries successfully. The absence of strawberry plantings in any locality should not deter anyone from attempting to grow them. In fact a lack of local supply may even increase the chances for success because of a better local demand.

### Selecting the Location

In general it can be said that any good garden soil will grow strawberries successfully. In selecting a site for larger plantings, a field should be chosen that has good drainage, and "frost pockets" should be avoided. In many low lying areas especially in the Coastal Plains section open ditches have provided adequate drainage. During the period of several rather dry years many of these ditches have been filled. A couple of more normal or wet years have shown to many of the younger berry growers that a return to the "faith of our fathers" in the matter of open ditches is necessary as well as profitable in growing fine crops of berries.

**Adequate moisture is essential.** Land that has been highly manured or that contains plenty of humus from turned-under cover crops such as cow peas, clover, rye, rank growth of weeds, etc., will have a high moisture holding capacity and is therefore desirable. Other soils may have moisture by being naturally springy or having a low elevation. Any or all of these are desirable for a good strawberry site. If possible fields following hoed crops are less likely to give trouble with weeds in the strawberry patch. Probably a sandy loam is the ideal soil type but heavier soils loosened up with plenty of humus and manure, or lighter soils made more spongy and moist by the same treatment can be used with good success.

Sod land should be avoided if possible, as the white grubs winter over in such land and cut off the young plants soon after they are set the following spring. If you have no other land available, plow it in the fall, harrow it during the winter and early spring as often as you can, and many of the grubs will be killed out.

### Preparing the Land

The roots of strawberry plants rarely penetrate further than one foot into the soil. It has been found that 90% were in the top six inches of soil with 73% of the roots in the top three inches. This emphasizes the importance of having these few inches of top soil in as good condition as possible for best results.

The matter of drainage, moisture-holding capacity and fertility are the important factors to consider if the location of planting strawberries has not been selected in advance. If selected the previous year, a green manure crop can be plowed in in the summer and an early winter cover crop such as rye planted and plowed in early spring. Stable manure applied to the previous crop is still good for strawberries, although it can be applied to advantage in the winter or

spring before planting. The land selected should be plowed in early spring. If stable manure is to be used it should be spread broadcast on the land just after it is plowed. Then the land either with or without the manure should be disced thoroughly and if necessary harrowed to level it up so that a nice soft even planting bed is available. As with other crops a loose friable soil in a good state of tilth is desirable for strawberries. While several successive crops of strawberries are sometimes grown on the same land successfully it is not considered good practice and if practiced results should be watched carefully.

### Green Manures

As an aid in preparing the land for strawberries, green manures are about as satisfactory as applications of stable manure, although possibly results are not as quick. Clover, beans, peas and other legumes are fine. Oats, wheat, rye, millet are also good. Legumes are preferred if a heavy crop can be grown. However, the nitrogen creating advantages of legumes may be offset by the heavy growth possible with non-legumes under some conditions. A heavy growth of ordinary field corn sowed broadcast and plowed under green when the growth was from three to five feet in height has given fine results in a few cases and is worth considering. Rank growth of weeds and grass if plowed under green are also valuable in adding humus and retaining moisture. Weeds and grass should not be allowed to go to seed, especially if a hoed crop like strawberries is to follow. Soil preparation for strawberry plants starts so early in the spring that winter cover crops should be selected which make a large amount of growth in the fall and if possible have a fairly large root growth. For this purpose we have found nothing better than rye planted early.

### Time to Set Plants

**EARLY SPRING IS THE LOGICAL, NATURAL AND MOST SUCCESSFUL TIME TO SET STRAWBERRY PLANTS. DON'T NEGLECT SETTING SOME PLANTS THIS SPRING, 1936, IF YOU WANT A CROP IN SPRING OR EARLY SUMMER, 1937. FALL, 1936 PLANTING (EVEN IF PLANTS LIVE) WILL MEAN LITTLE OR NO CROP UNTIL EARLY SUMMER, 1938.**

**EVERBEARING VARIETIES, EVEN MORE THAN OTHERS, SHOULD BE SET EARLY IN THE SPRING, BUT THEY BEAR THEIR BEST CROP IN SUMMER AND FALL OF THE SAME YEAR.**

### How Early?

Just as soon as weather permits getting ground ready. In the South, February, March and early April. In the middle states, March and April. In the Northern states, April. Also, the first half of May in late seasons and in states far north.

**Why so early?** Experience has taught that strawberries live better and grow better if they can become established early in the spring while the soil is still cool and moist. Late set plants are more likely to run into hot, dry conditions which make good results unlikely if not impossible. Furthermore, investigations have shown that runner plants made early are much more fruitful than those made in late summer or fall, see page 15. Early spring planting, therefore, tends to promote a larger percentage of highly productive, early set runner plants. If ordering plants be sure to order early enough so that they can be at hand as soon as the ground is prepared.

When a plant grower in the latitude of New York or Massachusetts can dig plants, berry growers in those sections should be setting their plants. This is a big advantage we can give growers in those latitudes. We can dig and ship plants earlier and have them right at hand for early planting.

## Care of Plants

Set plants on arrival if possible. It will help if roots of the plants can be dipped in water and allowed to "plump up" for some time before setting, perhaps over night. If plants have become quite dry and withered in transit it will help to put them in soak, that is to let them stay in the water for two or three hours, perhaps longer. When this is done, however, they should be set fairly soon after being taken from the water. At any rate have them thoroughly moistened and plump when planting. If anything prevents immediate planting and the weather is cool, the top of the crate should be taken off and the plants loosened in the crate, still keeping the roots covered with the packing material. Placed where it is cool, plants will keep like this for two or three days on early shipments. When plants are received late and lots of growth has been made, or where longer delays in setting are unavoidable, plants should be heeled in in some shaded or protected place. Dig a V-shaped trench, open the bundles, spread them out in thin layers with buds just even with the surface of the ground, then firm the soil back against the roots of the plants. If necessary several layers of plants can be heeled in the same place with one or two inches of soil between each layer. Wet the soil and plants thoroughly when heeling is done.



Too Shallow

Just Right

Too Deep

## Clipping the Roots

Some growers clip the roots of strawberry plants before setting. If not cut too short it does no harm. However, it is not necessary nor helpful if you can get the roots of the plants in the soil without being doubled up. It is better to clip the roots somewhat than to have them doubled up in the ground. Where a horse-drawn transplanter is used it is probably better to clip the roots anyway to expedite handling the plants unless they are very small.

## Distance to Plant

We recommend setting the plants in rows  $3\frac{1}{2}$  to 4 feet apart, or even as much as  $4\frac{1}{2}$  feet, if the soil is very fertile. The plants should be set 15 to 30 inches apart in the row, depending on the varieties set, the width of the rows themselves and the fertility of the land. Free growing varieties like Dorsett, Blakemore, Dunlap and Narcissa which make large numbers of plants

should be set farther apart than varieties like Chesapeake which makes comparatively few plants. When set in rows 3 feet 8 inches apart and spaced 20 inches apart in the row, it requires about 7,000 plants per acre.

## Setting the Plants

Where commercial fertilizer is to be used under the plants, rows should be run out 3 or 4 inches deep with a one-horse plow, the fertilizer drilled into these rows and thoroughly worked in. Then the soil should be thrown back into these furrows and again leveled off. Where considerable acreages are planted, a horse-drawn transplanter such as is used for sweet potatoes, tomatoes, tobacco, etc., is often used. To do a good job this way, however, requires skill and experience, if the crowns of the plants are to be left at the proper level with the roots extending straight into the ground and not set on a slant, oftentimes near the surface of the ground. This method requires a driver, two operators and another man to walk behind to fill in missing plants, reset those too high or too low and to firm the soil around the plants. A spade, trowel or dibble are the tools most often used in setting plants.

Where one of these is used, they are set down the prepared row with the roots of the plants spread out as much as possible and the bud of the plant just at the surface of the ground. It is also important to press the ground firmly against the roots and to see that dirt is filled in near the crown of the plant so that the top of the roots will not be left exposed. (See sketch for proper depth of planting.) Where the fertilizer is not put under the plants, the rows can merely be laid off with a marker and the plants set by any of the methods suggested down the marked row instead of down the fertilized row.

**IF FOR ANY REASON LATE SETTING IS UNAVOIDABLE, EXTRA CARE SHOULD BE TAKEN TO HAVE THE SOIL FIRMED VERY THOROUGHLY AGAINST THE ROOTS FROM BOTTOM TO TOP. FURTHERMORE, LATE IN THE SEASON ROOTS OF PLANTS TEND TO BECOME DRY AND WITHERED, AND FOLIAGE GROWTH HEAVY WITH LONG LEAF STEMS. UNDER SUCH CONDITIONS WATCH CAREFULLY TO AVOID SETTING THE BUD TOO DEEP.**

## Cultivation

**Uncover the buds.** The plants should be cultivated and hoed soon after they have started growth after being set out. It is very important at the first hoeing to uncover the buds of any plants which may have been planted too deep or have become covered after planting. If this is not done very early many of these plants will die. Most of them will not recover in time to amount to anything even though they might live allsummer. On heavy soils this is even more important and in some cases is the biggest single factor in failing to get a good stand of vigorous growing plants.

**Cultivate** often enough to keep the surface of the ground from becoming crusted and to keep down the grass and weeds. It is not necessary to practice deep cultivation. A depth of one to one and one-half inches is deep enough for the hoe, or perhaps slightly deeper with the horse cultivator. Frequent cultivation should be given even though weed and grass growth is not a serious



problem. A survey of strawberry fields in Indiana reported in 1933, showed that fields which were given five hand hoeings and about eight horse cultivations produced an average of 125 24-quart crates per acre, while fields that were given 7-7/10 hand hoeings and 14-4/10 horse cultivations produced 299 24-quart crates per acre. This was for the first year. It is likely, however, that part of this increase was due to better care in other ways as well as more faithful hoeing and cultivating. In the South, where mulching is not needed for winter protection, cultivation in the spring before the mulch is applied has been recommended by some. It is important to remember that two cultivations made in time are much more helpful and much less work than one made after grass and weeds get bad.

### Training

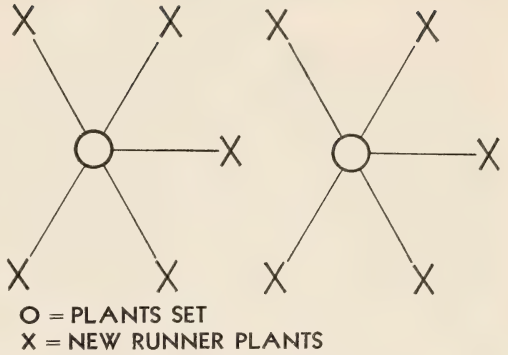
**We believe the well spaced matted row** is the most desirable system for getting the biggest crops of the **best berries**. From four to six plants per square foot are ample for fine results and we believe where they can be made early and strong plants developed that three or four plants per square foot would be even better. On page 14 we quote some figures and results from spacing. We want to point out here that we do not believe the average grower can afford to be too fussy about spacing the plants any particular distance. We do believe, however, that the grower (or his help that does most of the actual hoeing) should realize that **from four to six early set runner plants per square foot of row is the optimum number and that any excess plants made are no better than weeds and just as harmful**. If this is kept in mind and the excess ruthlessly taken out, as weeds would be, a great deal can be accomplished with very little extra time and expense. The width of the spaced row can be at the grower's option, whether 12, 18, 24 or 30 inches wide.

**Thickly set matted rows**, although producing heavy crops with some varieties, have the following disadvantages as compared with well spaced matted rows. 1. Smaller total yield. 2. Smaller average size. 3. Berries rot worse in wet seasons. 4. Run down faster in dry seasons. 5. Allow less effective use of mulching materials. 6. Conditions for pollination more unfavorable. 7. Berries poor in quality. With thickly set matted rows, most growers notice that the largest and best berries are produced along the edges. For this reason the practice of cutting out a strip down the center of old beds when renewing is often practiced because it gives more edges. Spacing, of course, provides the effect of having edges all through the row.

**Hill System, or Hill rows.** Under the hill system of training plants are set closer together, all runners are kept cut off, and the original plant depended on to bear the crop. A variation of this is the hill row. In this system the original plants are set quite far apart (about three feet) and sufficient runners for two parallel rows are allowed to set to fill in the spaces, the new plants being rooted from eight- to twelve-inch intervals and the two rows being about 12 inches apart. This system gives the benefit of growing in hills but requires far less plants than under the hill system proper. Grown this way berries will average as large or larger than the spaced row, and if rows are kept closer together the production per acre may be almost as great. Probably the work of keeping the surplus runners removed will be less. The hill row system adapts itself admirably to the use of mulching materials. The hill system proper is not recommended except for Everbearers. (See page 29.) The chief advantages of these systems are the same as for the spaced row with probably larger average size and better grade of berries but very considerably reduced yields as compared to the well spaced matted row system.

**Blossoms should be removed** from newly set plants as soon as they appear. To allow them to set berries and mature them involves a drain on the vitality of the plant. Removal of blossoms aids the plants in overcoming unfavorable conditions and in starting growth and runner production quicker, as well as helping Everbearers develop the vigor required to produce a crop of fruit so quickly after being set. This has much added importance when the extra fruitfulness of early formed runner plants is considered.

### Spacing Plan



Spacing Plan to Prove Results. Spacing for Profit Would Not Be So Exact.

### Starting the Spaced Row



Starting the Spaced Row. When Spaces are Filled Later Runners Are Cut.

### Section of Spaced Row



Section of Spaced Row as it Looks in October. Note the Large, Robust Plants. These Crowns are Chock Full of Strong Fruit Buds.

### Mulching

A mulch is applied for one or all of several reasons: First, to protect the plants from freezing and thawing of the soil in winter; second, to keep the soil cool and moist and to retard or check growth of weeds and grass during the season when fruit is being produced; third, to keep



berries from being spattered with dirt by rain during fruiting season; fourth, by delaying blooming it tends to prevent injury by frost in the spring.

**Time of application** and amount of mulch required varies. In northern regions where mulch is needed for winter protection it should be applied soon after the ground is frozen and plants have become dormant. In such cases three or four tons per acre of straw is advisable. Where some winter protection is needed, but it is not planned to leave straw on for frost protection in the spring, somewhat less material is needed. In southern sections the mulch is often applied after spring cultivation as it is not needed for winter protection. It will be found that mulching is much more effective in spaced rows or hill rows than in thickly set matted rows, as the straw can be worked down between the plants where it is less likely to blow away and where it aids in conserving moisture just where moisture is most needed. This is especially helpful in dry seasons. Where mulch is applied in the fall it is usually raked to the center of the rows in the spring about the time growth starts. To avoid frost injury by delaying blossoming the mulch is left on longer but removed before bleaching of young shoots becomes severe.

**Materials.** Wheat straw and marsh grass are considered the best materials, but rye straw, pine needles, coarse strawy manure and various kinds of hay or roughage can be used to advantage. Another practice is to plant oats between the strawberry rows in September. These make a good growth before frost when they are killed. They are left and serve as a mulch at fruiting time. There is not much winter protection afforded by this practice and in dry seasons there is danger of the oats taking too much moisture. Otherwise the practice looks good for sections not needing winter protection or spring cultivation. Summer mulching is not recommended for spring bearing varieties. Under some conditions it may be used to advantage with Everbearers.

## Manure and Fertilizer

It should be noted that many fertile, well drained soils on dairy farms, truck farms and on naturally rich soil do not need the addition of any chemical fertilizers. A rank healthy growth of plants, with vigorous dark green foliage is evidence that more fertilizer is not needed. However, most soils where strawberries are grown will give some response to the proper use of additional fertilizer. Barnyard manure, supplying both nitrogen and humus is the best fertilizer for strawberries. It should be applied broadcast and disced into the soil before plants are set. Equally satisfactory results are had if this has been applied to the previous crop.

**Nitrogen** has more effect in influencing strawberry production than any other element. Good results are also had from phosphorus under some conditions. Potash gives little or no response. It is claimed without convincing evidence that potash increases the firmness of the berries.

**As a plant starter and grower** we use about 700 pounds of a mixture composed of 1500 pounds Dissolved (Acidulated) Bone and 500 pounds of Super Phosphate. We have had fine results from this mixture put in the drill before plants are set and thoroughly mixed into the soil. This mixture can be applied with good results as a side dressing soon after the plants are set and growth started in the spring. Where Dissolved (Acidulated) Bone is not available, we recommend the use of tankage, cottonseed meal, or some other organic nitrogen along with bone meal or Super Phosphate to give a formula fairly high in both nitrogen and phosphorus. Salts of both Nitrate and potash should never be put where they will come in contact with the roots of strawberry plants. By using a complete fertilizer which included some of these in the drill under plants many fields of plants in the past have been killed out very badly, the dying out occurring all through the summer as the plants become gradually weakened. We do not recommend broad-

casting fertilizer for the young strawberry patch. Better and more economical results will be had with smaller amounts applied more directly to the plants as outlined above.

**Late summer applications.** Evidence is accumulating that late summer applications of fertilizers will produce far better results than applications made the following spring. In this section the general practice is to fertilize just before growth starts in early spring. It seems likely that better results would be had from late summer applications except possibly in cases of old beds or of young beds where leaf disease was an important factor, or on poor soils with varieties that naturally made too little foliage growth. Our August-September mixture consists of 700 pounds Nitrate of Soda, 300 pounds of tankage, 100 pounds of dry fish, 900 pounds Dissolved (Acidulated) Bone, which gives an analysis of about 9-5-0. Of this mixture we use from three to seven hundred pounds per acre depending on the condition of the plant beds in regard to vigor. In all cases we make the application only when the foliage is thoroughly dry and this is brushed off the leaves with a cedar or pine branch swung up and down the row to keep the fertilizer on the bed. Most soils have sufficient potash naturally in the soils or left over from fertilizers applied to the other crops but if it is felt that some potash should be added for insurance we would recommend not more than two or three percent. Excessive quantities of nitrogen should be avoided as too rank growth which an excess of this element produces, is not favorable for pollination, keeping quality or total yield. One of the reasons for favoring August-September applications is that nitrogen applied then is effective in aiding fruit bud formation and building up larger, stronger crowns without apparently causing as much softening of the berries as when applied in spring.

**Spring applications** in this section are made mostly with a complete fertilizer, about 4-8-4 or 7-6-5. However we prefer and use the 9-5-0 mixture suggested in preceding paragraph whenever we make any applications in the spring to our own beds.

Large berries of any variety are not as firm as small ones. The **proper amount** of nitrogen fertilizers does not make berries softer except as it makes them larger. An **excess** of nitrogen will make them softer and more subject to rot. Applications of nitrogen and phosphorus together have resulted in better quality fruit in a number of tests.

For further discussion of the value of late summer fertilizing see page 15. Also it will pay, especially in northern sections, where strawberries are often planted on rich soils, to consider carefully before any chemical fertilizers are used, especially with such rank growing varieties as Dorsett, Fairfax, Catskill and others. Where excessive growth and softening of the berries from nitrogen is not feared it is possible to delay ripening of any variety for several days by its use. Growers in the north sometimes do this to delay their crop until after shipments from sections further south have slackened.

## Soil Acidity and Lime

Strawberries grow best in a soil that is slightly acid. They grow satisfactorily in soils running from slightly sweet to moderately acid. They will hardly grow at all in soils that are moderately sweet or very acid. For those familiar with pH tests for soil acidity we can say that the optimum is from 5.7 to 6. The range of satisfactory growth is from 5 to 7 and they will survive within a range of 4 to 8. Experiments in Virginia and elsewhere demonstrate that strawberries will thrive under more acid conditions if there is a large content of organic matter. Where strawberries have been planted on soils that are quite sweet Ammonium Sulphate should be substituted for Nitrate of Soda in fertilizer applications. If lime is to be used to correct a very acid condition we would prefer to have it applied to the previous crop or at least during the fall preceding spring setting.



## Irrigation

Various forms of irrigation are used by growers in different sections. Overhead irrigation is used successfully in many places. In addition to supplying moisture, proper handling of this method may enable a grower to ward off light frosts by keeping a fine mist in the air on frosty nights. The big advantage, however, is in providing adequate moisture. The main disadvantage is that it wets the foliage and plants causing them to be more likely to rot than if kept dry.

Surface irrigation is used mostly in the west where water supplies are available for this purpose. Canvas Hose Irrigation is a new and promising method of irrigating small plots of garden crops as well as larger areas of strawberries. It has several advantages over overhead irrigation, chief of which are that water can be supplied at somewhat less expense, the foliage and fruit of plants are not wet and the method is flexible enough to adapt itself to any type of water supply. We have not used this method extensively ourselves but can give some information about it and supply the name of manufacturers to those who are interested.

In conclusion we want to point out that while irrigation is helpful it is not necessary for good

results. Most of the good berry crops in this country are produced on good strawberry land that has been well filled with organic matter by the addition of stable manure or growing green manure crops.

## Perfect and Imperfect Varieties

Perfect flowering varieties planted alone will mature a crop of perfect fruit. Imperfect flowering varieties should have perfect varieties planted with them, at least one row for every five or six. When two varieties are used in equal amounts, they are often alternated three or four rows of each. Alternating plots of different varieties made necessary by one of them being imperfect are a nuisance to the grower at harvest time. In our price list perfect flowering varieties are followed by "per" and imperfect varieties by "imp."

## Spraying

Spraying is not usually necessary in growing strawberries successfully. Care in purchasing healthy plants, and in selecting varieties immune or resistant to disease and insects is much more important.

# Making Everbearers Do Their Best

For best results Everbearing strawberries, which must make their plant growth as well as bear their first crop within a few weeks after setting, need some extra care.

**1. Good strong plants** should be used and set early in order to insure a good start.

**2. Blossoms should be cut off until about July 15th to 20th.** As it takes about one month from blossoms to berries, picking would start about August 20th. Cutting all blossoms until August 15th would probably increase the average size of berries produced but would decrease total yield.

**3. The hill system is best.** Lack of total production in the fall has been the chief criticism of Everbearers. Careful experiments show that removal of runners not only builds up stronger individual plants but increases blossoms and fruit production. This checks with years of observation that Everbearing plants in matted rows which have made few runners or none always have the most berries. However, good results are often obtained from matted rows unless they have been allowed to get very thick and crowded.

**4. The second fall crop** will be far better if the plants are not allowed to produce the regular spring crop. Blossom cutting which would be necessary is far easier if plants are grown by the hill system or in very thin narrow rows. This practice may not be profitable, however, so try it in a small way until you know.

**5. Mulching.** Experiments indicate that summer mulching increases total yield little or none. However, by helping keep down weeds it reduces labor and by keeping berries clean and bright it increases the value of the fall crop.

**6. Fertilizer.** Everbearing varieties which are expected to do so much so quickly need heavier fertilizing than regular kinds. A heavy application of barnyard manure before setting would be fine. Fertilizer as recommended on page 12 should be used at planting time with a later application in July or early August. At this time use the 9-5-0, which contains no potash. Apply fertilizer when plants are thoroughly dry and get it off the leaves.

**7. Ample moisture increases size and yield** of Everbearing strawberries. It also increases the efficiency of fertilizer applied. It is important, therefore, to select land naturally springy or well filled with organic matter. Many good crops are produced without irrigation, but one of the largest and most successful growers of Everbearers says: "I do not really think there would ever be a season with enough moisture but that irrigation would almost double the yield of berries and give a much better quality." Any method of getting the water applied would be satisfactory.

**8. Planting distances.** Everbearers are grown in wide or narrow matted rows, in hill or hedge rows, or by the hill system. With matted rows, plants are set about 18 inches apart in rows  $3\frac{1}{2}$  feet apart. In the hill or hedge rows plants are set somewhat further apart and the rows about 3 feet apart. Runners are trailed down the rows to fill in the hill rows or somewhat thicker hedge rows. In the hill system rows should be about  $2\frac{1}{2}$  feet apart with plants 12 to 15 inches apart in the row. Any system is satisfactory where plants are kept well spaced, although we recommend not more than five or six new runners from each plant set. Probably the hill system, with all runners removed, although requiring more plants, will give the greatest total yield per acre for the fall crop.





Section of Our Variety Spacing Experimental Plot for Fruiting in 1936

## Visit Our Variety Spacing Experiment at Fruiting Time

In May and June 1936 we will be fruiting berries from an experimental plot in spacing Dorsett, Fairfax, Catskill, Blakemore, Big Joe and Premier plants. This is being done in co-operation with the U. S. Department of Agriculture and University of Maryland. They will be responsible for taking the records. It is one of the finest experimental plots we have ever seen and we are expecting to get some valuable information from it. We invite you to come and see this plot at fruiting time. You will be welcome. Best date about May 25th, 1936.

Other strawberry spacing experiments conducted by Agricultural Experiment Stations, with probable date of ripening, are as follows: Willard, North Carolina... April 25th, 1936 Amherst, Massachusetts... June 10th-15th, 1936 Wooster, Ohio... June 10th-15th, 1936 East Lansing, Michigan... June 15th, 1936

Visit some of these if you can. We are sure you will be welcome. Other stations may be doing some spacing work also. We are informed that both Tennessee and Rhode Island have planned some spacing work for 1936-37.

## What to Expect From Spacing Strawberry Plants

For improving both the quantity and the quality of strawberry crops we believe some attention to thinning and spacing the plants offers greater possibilities than any other practice. As stated on page 11 it may not pay to be too fussy about exact distances, but if in the ordinary operations of hoeing it is recognized that all plants in excess of four to six per square foot are weeds which rob the producing part of moisture and fertility a great deal can be done in this respect at not much extra cost. To indicate actual results from spacing plants we are repeating the table from work done in North Carolina in 1933-34 which we used last year.

System of training	Yield in 32-qt. crates per acre	Per cent of U. S. No. 1 berries	Relative size of berries	Per cent of berries showing decay after 24 hours
Double hill row with runners rooted early.....	110	90	100	5
Rows 24 inches wide with plants spaced 9 inches apart .....	156	84	88	8
Rows 24 inches wide with plants spaced 6 inches apart .....	149	80	80	10
Matted rows 12 inches wide.....	66	68	72	16
Matted rows 30 inches wide.....	72	57	62	26

Note that yields increase with wider spacing up to 9 inches apart. Note also the poorer keeping quality of berries from the thick, densely shaded matted rows. In other of the N. C. experiments rows with plants numbering 30, 4, 1.8 and 2/3 of a plant per square foot produced yields of marketable fruit of 40, 119, 131, and 99 crates per acre respectively.

To check this up with our discussion of leaf area on the next page it is pointed out that plants in the row spaced 9 inches apart which produced 156 crates per acre had, in the previous fall, 9 2/10 leaves per plant, while plants in the 30 inch matted row which produced 72 crates per acre had only 3 leaves per plant the previous fall.

The benefits from spacing will be much greater with free growing varieties like Dorsett, Fairfax, Blakemore, Narcissa, etc., than from others which normally do not make as many plants. Furthermore, with a variety like Dorsett which is very easily over-fertilized greater amounts of fertilizer can be used profitably in building up a few large strong plants which have been rooted early and retained.



# Importance of Leaf Area in Berry Production

The total yield of berries in the spring is governed largely by the number of leaves per plant the preceding fall. The following results from controlled leaf area on Fairfax are typical of results on a total of ten varieties in three places and for two years, reported in 1934 by Darrow (U. S. D. A.) and Beaumont (Md.).

Variety	Leaves per plant Fall 1934	Results in June 1935			
		Leaves	Berries	Flowers	Clusters
Fairfax .....	2—leaves	14.5	12.2	15.5	1.8
“ .....	4— “	17.0	36.3	47.6	4.0
“ .....	6— “	31.8	59.0	72.5	4.3
“ .....	8— “	25.3	69.7	84.0	5.3
“ .....	10— “	32.5	77.3	97.1	7.3

The larger the number of leaves per plant during the fall, the larger the crop the following spring. Plants in a thickly set matted row with only two or three leaves per plant may be expected to yield only about one-fifth those in spaced rows with ten leaves or more per plant. In these experiments leaves were limited to ten per plant but indications are that with more leaves per plant the crop may be increased in proportion. Fruit bud formation in the strawberry takes place in the fall. It seems likely that the extent of it is determined very largely by leaf area. Fall application of fertilizer, especially nitrogen fertilizers, tends to increase the size and vigor of the plants formed rather than to stimulate runner production. It, therefore, aids in developing a larger leaf area and greater fruit bud formation. All of this seems to indicate that by applying fertilizer in late summer or fall, the effect of nitrogen in increasing total production can be had to a large extent without the softening effect which often comes with the use of lots of nitrogen in spring applications. In practice all of this means select fertile soil, set plants early, give them good cultivation, and use any other means to get the largest number of leaves per plant at the time fruit buds are being formed, which is in the fall except in regions far South.

## Early Rooted Runner Plants Are More Productive

In Ohio in 1928 yield records were kept of berries from runner plants in twenty-five rows of Premier formed in different months during the season.

	No. of plants rooted	Total yield in quarts	Yield per plant in quarts
Parent plant .....	375	48.8	0.13
Plants rooted in June .....	162	21.9	0.14
“ “ “ July .....	1,989	79.0	0.06
“ “ “ Aug. ....	3,884	131.1	0.04
“ “ “ Sept.-Oct. 15 .....	1,127	13.9	0.01
“ “ “ Oct. 16-Nov. ....	3,375	23.2	0.009

It will be noted that plants formed in June and July are fifteen times as productive as those made in late October and November. These results check with those made at several other places. If the runner plants had been cut as soon as the new plants were rooted and earlier plants had not helped make and maintain the later ones, the yield differences would probably have been even greater. However, these are sufficient to show the importance of getting good plants, having the ground in good condition and setting the plants out early, so that they can make a good number of early runners which will develop into the most highly productive plants.



Early runners were saved and carefully spaced. These plants had built up a tremendous leaf area by late October.



# DORSETT      FINEST      FAIRFAX

## WE'VE SEEN IN 51 YEARS

These varieties have shown us more real value than any other early berries we have seen in our 51 years' experience. In our 1934 Berry Book we stated prominently that we believed Dorsett and Fairfax afforded the greatest opportunity to cash in on something new and better than we had seen in all our experience. We followed our convictions and planted heavily of both varieties. While we acknowledged that the 1935 fruiting season was favorable there, the facts are that in 1935 we picked more berries, better berries, obtained greater yields per acre, beat the market price more and made a greater net profit per acre and in total than in any year of our 51 years. Furthermore, while we freely admit that some reports of both Dorsett or Fairfax were not favorable as to productiveness, yet we can state truthfully that we have had more favorable comments from either of these two varieties and Catskill than we have ever had from any other variety in the first year or two of fruiting. No variety, not even Premier, does well everywhere and under all conditions, but these good reports of Dorsett and Fairfax come from all over the country, as you will note by reading some of the letters from enthusiastic growers. We will discuss in comparison with each other and with Premier some of the characteristics which make Dorsett and Fairfax so valuable.

### Origin

Both Fairfax and Dorsett are seedlings of the Premier (Howard 17) and Royal Sovereign, an old English variety of high dessert quality. Fairfax has been grown since 1925, Dorsett since 1923. They were originated by Dr. George M. Darrow and his assistants in the U. S. Department of Agriculture and were selected from fields containing thousands of seedlings from scientific crosses, several hundred of which had the same parentage.

### Healthy Foliage

No varieties have healthier foliage. Vigorous; it is hard to find a trace of disease on them and the leaves stand up strong and fresh clear through the fruiting season.

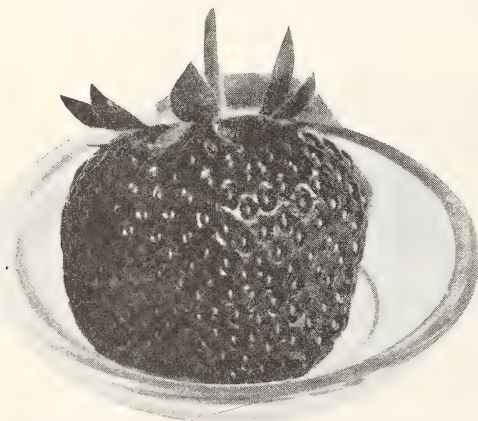
### Vigor of Plant Growth

Dorsett and Fairfax stand out in any group of varieties for the vigor of growth, although

Dorsett usually makes more plants than Fairfax. Under favorable conditions both varieties make far too many plants. Dorsett especially. Some attention to spacing and limiting the plants formed (three to six per square foot is recommended) will pay with both varieties, and under good growing conditions is almost a necessity with Dorsett if good results are to be obtained.

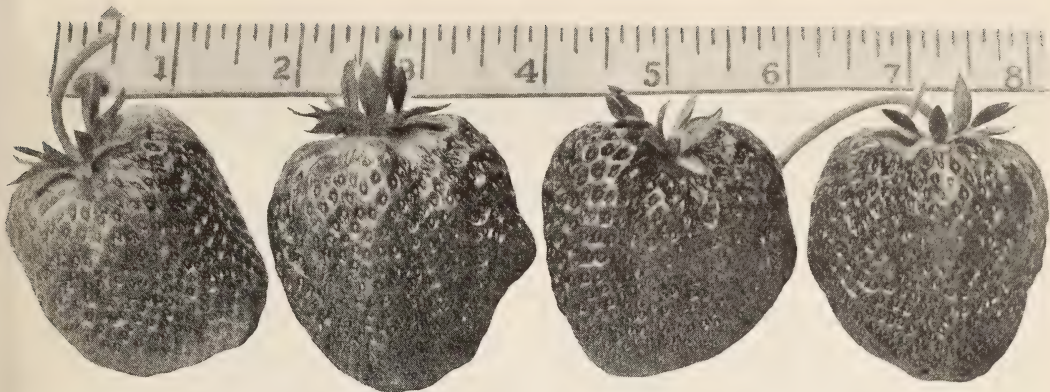
### Productiveness

Dorsett and Fairfax produce tremendous crops of berries when grown right. Our own records show them more productive than Premier and many of our reports from growers show that others have found Dorsett or Fairfax or both equal or superior to Premier in this respect. In other reports Dorsett and Fairfax, though hardly equal to Premier in productiveness, do equal or surpass it in profit on account of the greater value of the berries. Still others find Dorsett and Fairfax, or especially Dorsett, lacking in productiveness under some conditions where Premier comes through with a crop. To assure satisfactory production we would say the most important thing is to limit the over-production of runner plants. The plants that are left will then build up a large leaf area per plant in the fall and strong crowns from which big crops of berries are produced. If this is done both varieties can make far better use of fertilizers applied in late summer or early fall when fruit bud formation is taking place. Fairfax makes a strong bloom with plenty of pollen and just as high an average of perfect blossoms as Premier. Dorsett naturally has a larger percentage of false blossoms than either Fairfax or Premier. Under unfavorable conditions due to frosts, over-crowding, etc., some of these blossoms do not live at all or else survive and produce nubbins. If severe spacing is practiced and nitrogen fertilizers are applied in the fall it seems likely that fruit bud formation will be encouraged and stronger blossoms formed which will help assure tremendous crops the following season. An occasional criticism of Fairfax has been that although the first berries are extra large in size, some of the later berries run down almost as bad as Premier. With these also there is some evidence to indicate that spacing the plants and applying nitrogen fertilizers in late summer will help materially in making all the berries large. **It is the number of leaves per plant in the fall which determines the size of the crop the following year (see page 15), and plants cannot make lots of leaves if they are over-crowded.**



Fairfax—Fine for Profit and Pride





**Many Dorsett Berries Measure Two Inches or More Across**

## Perfect Blossoms

Both Dorsett and Fairfax have perfect blossoms so do not require other varieties for cross-pollination. Fairfax and Premier both have somewhat larger blossoms and somewhat more fertile pollen than Dorsett. This fact makes it especially important to keep Dorsett plants fairly thin in the row as a very thick bed makes conditions unfavorable for complete setting of the berries.

## Season of Ripening

As with other fruits, varieties of strawberries vary with soil and other conditions as to comparative ripening date. The average of several years, however, seems to indicate that Dorsett ripens with Premier or perhaps one or two days later, while Fairfax on the average is four or five days later than Premier. Reports indicate that these differences are greater farther north and less farther south than Maryland.

## Size of Berries

Dorsett and Fairfax berries average very large in size, considerably larger than Premier or Blakemore. They are fully as large as that aristocrat of all late berries, the Chesapeake. In fact, Fairfax resembles Chesapeake very much in size and appearance, except that it seems to be even more highly polished. We hope you will read on page 20 comments on size of berries as reported by growers of Fairfax and Dorsett in several states.

## Firmness of Berries

Fairfax and Dorsett berries are both very firm, Fairfax being somewhat the firmer of the two. Blakemore is considered very valuable as a long distance southern shipping berry largely because of its unusual firmness. As compared with Blakemore, Fairfax is slightly more firm and Dorsett slightly less firm. Both of them are much firmer than Premier and are suitable for shipping berries as well as for local market and home use. Furthermore, they are firm enough to stand up better than most other varieties where lack of sufficient labor makes it impossible to keep the berries picked closely, and where they are subjected to very wet conditions due to frequent rains.

## Color of Fruit

Dorsett berries at the proper picking stage are medium light in color and retain their lightness to a very high degree even after they begin to get quite ripe. However, they are not as light

as Blakemore or Aberdeen. Fairfax berries at the proper picking stage are a beautiful rich red, but become quite dark after they get riper, and almost purple for several days before they decay. 1934 and 1935 experiences in many places showed Fairfax outselling Dorsett. Buyers soon learned that the dark color does not mean decay. At the stage when Premier and varieties of similar firmness start to decay, Fairfax merely turns darker for several more days.

## Appearance

Both Fairfax and Dorsett are beautiful, showy berries. Dorsett will attract some more on account of its lighter color, but Fairfax has prominent yellow seeds and a shiny, almost polished skin which makes it very rich looking. Both Fairfax and Dorsett look well in the package and would bring top prices on the markets on showiness alone.

## Quality

Almost unanimous among those who have eaten them is the opinion that Dorsett and Fairfax far outrank all other berries in dessert quality. This is one point about which there is practically no argument or difference of opinion. A taste of a few well-grown berries of either Dorsett or Fairfax will convince the skeptics. When Dorsett and Fairfax have replaced many of the lower quality berries we are convinced that the consumption of strawberries will increase. Our Philadelphia commission merchant who sold several thousand quarts of Dorsett and Fairfax for us this season told us that he personally had eaten more strawberries this year than in any other year, and that many of his customers were enthusiastic about them because they sold out so readily and buyers came back to ask for them by name on account of the high flavor.

## Dorsett or Fairfax—Which?

Both of them are well worth growing. Commercial growers as well as home gardeners should try both. One may do better than the other on account of adaptability, color of the berries, or some other factor. We have given honest information about them to the best of our ability. We are quoting for you actual experiences from a great many growers in different states. Whether ordering either or both we do not feel that you will make any mistake. As a berry grower, the worst mistake would be to pass them by without a thorough trial. Price list, page 33.



# PRODUCTION·PRICE·PROFIT

With **DORSETT and FAIRFAX** IN 1935



## Iowa

You are safe in recommending Dorsett and Fairfax in Iowa. They yielded better than Premier for us, the first picking running 18 to 20 berries per quart and later pickings only 28 to 30. The season's average was 16½¢ per quart which was considerably better than other growers obtained with other varieties. Dorsett and Fairfax held up better during a rainy spell than Premier and Dunlap, and we could not supply our customers fast enough as they found there was such a difference in quality. I shall plant these varieties only for early berries.—Mr. Delmar L. Hoepner, Scott Co., Iowa.

## Kentucky

In April 1934 I set 9-10 of an acre with your Dorsett and Fairfax plants. In spring 1935 I sold \$2.40 quarts from them. They were the finest berries I have ever grown. My brief experience has been mostly with Premier. Our local customers would have nothing but Fairfax, but I like Dorsett best for shipping because of the lighter color, as most buyers are convinced that nothing but a light red berry will hold up. My profits this year were good and I expect to continue growing both Dorsett and Fairfax.—Mr. W. A. Moody, Jefferson Co., Ky.

## Maryland

From the 5,000 plants purchased from you in 1934 I picked 8,000 quarts this year. Dorsett beats anything I have ever grown or seen in over 40 years.—Mr. John Hicks, Somerset Co., Md.

## Massachusetts

I am inclosing statement from my Boston Commission men about my sales of Dorsett berries shipped them this season:

Average price on Boston market in crates				Prices received by Souza	
June	24	.06¾		10 trays	.17
	25	.08½		7 "	.25
	26	.07½		6 "	.25
	27	.08		5 "	.20
	28	.08½		4 crates	.15
	30	.07		7 trays	.20
July	1	.07		5 "	.20
	2	.07		3 "	.16
				3 "	.18

(Signed) Hannaford Bros. Co.

I am very much pleased with both Dorsett, and Fairfax and Catskill too.—Mr. Frank Souza, Barnstable Co., Mass.

## Michigan

I have grown strawberries for over 60 years. Dorsett and Fairfax are the best I have ever grown or seen. The plants are very productive, the berries very large in size and so sweet no sugar is needed. My Dorsett and Fairfax sold from four to six cents above the market price.—Mr. Frank Fishell, Montcalm Co., Mich.

## Missouri

Our Dorsett berries this spring yielded slightly better than Premier. The season was very wet but the quality was good and they did not rot as much as Premier. The Dorsett berries sold at the top of the market. I have not yet fruited Fairfax.—Mr. Robert W. Scheidt, St. Louis Co., Mo.

We found the bearing season of Fairfax and Dorsett very long, lasting until the end of Chesapeake and Big Late. We had no Premier this season but Dorsett and Fairfax yielded more than Blakemore, Big Late or Chesapeake. The berries were large in size, the end of the crop holding up better than any berries we have ever grown. Our price ranged from \$1.40 to \$2.40 per 12-quart tray. Premier from other growers sold at \$1.00-\$1.75. Our retail price for Dorsett and Fairfax was from 15¢ to 25¢ per quart.—Mr. F. W. Pies, Jefferson Co., Mo.

## New Hampshire

Our local market prefers Fairfax to Dorsett although both are very attractive and excellent in quality. With us this year Fairfax were larger in size than Dorsett and somewhat more productive. I kept no strict account of Dorsett yield, but from 500 Fairfax plants I picked 570 quarts. Both sold for 5¢ a box above the market. People came from miles around after my berries. One morning I placed a crate of Fairfax in a local fruit store. They had just bought a crate of Premier. At noon they called me for another crate. My Fairfax were all sold and only four boxes of the Premier. Price, Premier, 2 boxes for 15¢. Fairfax, 2 for 35¢. My Dorsett and Fairfax plants outyielded, sold better and were better than any Premier or Howard 17 grown in this section in 1935.—Mr. H. F. Moulton, Rockingham Co., N. H.

## New York

The 1,000 Dorsett strawberry plants are very well adapted up here in our section as the frosts that we had and cold winter did not seem to have any effect on them. Lost about one-half dozen plants out of 1,000. Vigorous growth and a very heavy crop this year of nice berries.—Mr. L. E. Loomis, Chautauqua Co., N. Y.

Enclosed find check for a small order of plants. The Dorsett plants bought of your firm last year proved to be wonderful berries here with us. Wish I had taken your word and ordered ten thousand.—Mr. James Rankin, Schenectady Co., N. Y.

## Indiana

On my soil I think Dorsett and Fairfax cannot be beaten. From 400 plants of these varieties I sold 525 quarts of berries, receiving \$50.00. Whenever I sold them I would get repeat orders. The berries were the largest in size I ever raised and the best in quality. I aim to plant more next spring.—Mr. W. I. Hollis, Clark Co., Ind.

I am a Fairfax booster. They were marvelous this year. They sold for \$1.65-\$1.75 per crate more than Premier or any other variety. I sold Fairfax at 15¢ per quart, Premier at 3 quarts for 25¢. In a week of cold, wet weather, they held up splendidly while Premier and the others rotted badly. While Dorsett is a fine berry we like Fairfax best as our market prefers dark red berries. Comparing the yield with Premier they are not quite as heavy yielder. I kept track of one row as follows: Premier 80 quarts, Fairfax, 71 quarts, but the difference in price makes Fair-



fax more profitable and they were much easier to sell. I spaced my Fairfax plants about five to six inches apart which accounts for such fine big berries.—Mr. Chester A. Kuhns, Carroll Co., Ind.

## Connecticut

Fairfax is the most attractive berry we have grown. While not as heavy a producer as Premier they cropped very heavily for us in 1935. The berries were very large and made us many new friends. Dorsett were grown beside the Fairfax and on very rich land. They made a very thick and crowded set of plants in the row and were probably over-fertilized. The yield was very disappointing.—Mr. George S. Hart-Pharos Farm, Hartford Co., Conn.

## Illinois

My Fairfax and Dorsett berries brought an average of 22¢ per quart this year and I couldn't supply the demand. Had lots of compliments on the quality and flavor of the berries as well as on their fine appearance. They were very large in size. Some of my buyers said they were not strawberries, they were tomatoes. Both produced a heavy crop but Fairfax somewhat the heavier. I expect to continue growing both varieties, but Fairfax mostly.—Mr. Charles Allgire, Saint Clair Co., Ill.

## Ohio

Our Dorsett and Fairfax berries were very productive this year. They ran from large to very large in size. In general appearance none were better, not even Chesapeake, and they brought top price on the market. In the wet season we had this year Fairfax and Dorsett kept better than Premier which had plenty of bad berries. Dorsett, Fairfax and Chesapeake will be our three main crop varieties.—Mr. John Bockreth, Allen Co., Ohio.

From 500 Dorsett and 500 Fairfax plants set in 1934 I picked over 1300 quarts of berries, more from Fairfax than Dorsett. The quality of both was very fine. Received an average price of 12½¢ per quart. Will order more Dorsett and Fairfax next spring. I did not order this past spring because I did not know how good they were until after fruiting them.—Mr. Wm. Nico-demus, Franklin Co., Ohio.

## Oklahoma

We have found Dorsett and Fairfax more profitable than any variety we have ever grown. They produced heavy crops and brought good prices. Last season was very dry at fruiting time and we thought Fairfax the better. This season was quite wet and Dorsett showed up best.—Mr. J. W. Violet, Johnston Co., Okla.

## Pennsylvania

You have my thanks for introducing those wonderful Fairfax and Dorsett berries. We give Dorsett a little preference because of lighter color. Both were very large. Sometimes we filled a quart box with fifteen berries. We received \$4.50 per crate for many of them. Dorsett and Fairfax grown side by side and receiving the same treatment as Premier made one and one-half times as much money per row as Premier. We had to make the pickers go over the Premier first every picking to get them picked at all.—Mr. Walter M. Rohrer, Lancaster Co., Pa.

My Dorsett and Fairfax berries this year were very productive, but equally as good as Premier. The berries were extra large for a dry season and had a wonderful flavor. In firmness and keeping quality they are better than any I have ever grown.—Mr. Ralph R. Glatfelter, York Co., Pa.

## Virginia

I am glad to report a fine season on Fairfax berries. I like them better than Dorsett. Last year was very wet all summer and it was impossible to keep my field clean of grass. In spite of

this serious drawback I marketed \$1,780.00 from my planting of less than three acres and about one acre of an old Premier patch. I trucked my berries to Washington and they phoned me that my berries were the best ever seen on that market. The introduction of Fairfax marks a long step forward in berry profits. I am glad you told us about this variety in your 1933 catalog.—Mr. Fred Harvey, Gloucester Co., Va.

Five hundred of your Dorsett plants set in spring 1934 yielded 600 quarts. Six hundred Premier about half as many. The Dorsett berries were much larger than Premier and better in quality, appearance and firmness. They sold on our local market from three to five cents per basket above Premier. The Dorsett made a thick stand of plants and had to be thinned. I did not use any fertilizer at all. I had a few Fairfax fruiting in 1934 but do not like them as well as Dorsett.—Mr. Carl Somers, Page Co., Va.

## West Virginia

Have been cultivating strawberries from your stock for several years with success. From 2,000 Premier, 400 Dorsett and 400 Fairfax purchased from you in 1933 we picked over 2,000 quarts. Sold \$176.00 worth besides all we could use. Fairfax is the best berry in every way except that Premier is slightly more productive. Dorsett less productive than Premier with me. Fairfax most profitable, selling at 20¢ per quart, Premier 10¢ to 15¢ per quart.—Mr. O. O. Givens, Kanawha Co., W. Va.

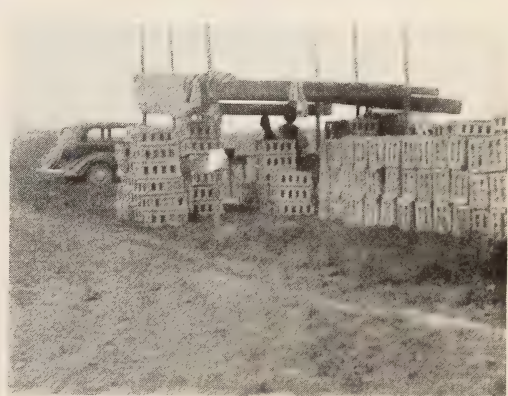
## Wisconsin

In productiveness Dorsett is the best variety we have. Fairfax makes a good crop, equal to Premier but not quite as good as Dunlap with me. Both Dorsett and Fairfax were large, but Dorsett held its size best. Dorsett sold easily at 25¢ per crate over Dunlap and Beaver. We received much favorable comment on our Dorsett from other growers. Can truly say it is the best berry we have grown here in Western Wisconsin, especially for retaining size, shape and appearance up to the very last picking.—Mr. George C. Nygaard, Vernon Co., Wis.

## Minnesota

The Dorsett strawberry made its first appearance in the Minneapolis market this spring, bringing 50¢ to 75¢ per crate more than any other strawberry on the market.—News item from the July, 1935, edition of the Minnesota Fruit Grower.

**Dorsett and Fairfax at their best are so much better than any other early varieties that no grower can afford to pass them by without a thorough trial.**



**An Inexpensive Type of Packing Shed, Which We Find Satisfactory.**



# Dorsett and Fairfax

## Size Makes the First Sale—Quality Brings Them Back

**"Dorsett berries large and uniform in size. Fairfax extra large in size. Some weighed two and one-half ounces—too large to crate."**—Harry E. Benson, Carroll Co., Ohio.

**"Had berries measuring six inches around. Largest I have ever grown. One-half larger than Premier."**—Mr. E. G. Hall, Monroe Co., Ohio.

**"Our Dorsett and Fairfax berries were good sized, marketable berries down to the last picking. The first picking was extra large, a customer finding one that measured  $7\frac{1}{4}$ " in circumference. They were easy to sell. My mistake was in not getting more plants."**—Mr. Roland Horney, Logan Co., Ill.

**"My Dorsett and Fairfax berries were the largest I ever saw and the flavor was delicious. The demand for them was so great I could not supply all my customers."**—Mr. Batie Watts, Jessamine Co., Ky.

**"I had five Fairfax berries that laying side by side measured more than 12 inches. I have several that measured three inches in diameter, and one which measured 12 inches around the outside. Dorsett did not have as many unusually large ones but there were many that measured  $2\frac{1}{2}$ " to 3" in diameter. Most of them brought me 40¢ per quart. I am indeed pleased."**—Mr. H. W. Miller, Kosciusko Co., Ind.

**"Your files are probably full of reports of large berries grown on vines that you sold, but still I want to add this one. Among many berries that were over 6 inches in circumference grown on Dorsett vines bought of you there was one that was  $9\frac{1}{2}$  inches in circumference one way**

**and  $7\frac{1}{2}$  inches the other and it was just fine in flavor."**—Mr. A. P. Marty, Baltimore Co., Md.

**"People are beginning to learn that there is a difference in strawberries as well as other fruits. After our customers tried Dorsett and Fairfax we could not supply the demand."**—Mr. Otto Gant, Ross Co., Ohio.

**"The pickers all wanted Dorsett to take home. No more Premier."**—Elmer J. Schrock, Douglas Co., Ill.

**"Best in this county for quality. All other kinds were turned down for the Dorsett."**—Mr. G. Eulitz, Cumberland Co., N. J.

**"Fairfax is best of all in quality. Dorsett not far behind. They are both easy to sell."**—Mr. R. E. Dewey, Jefferson Co., Mo.

**"Both Fairfax and Dorsett far superior in quality to Premier, and our sales records show that they are more profitable than Premier as well."**—Mr. Fred B. Edgell, Harrison Co., W. Va.

**"My pickers always wanted to pick first in the Dorsett and Fairfax on account of the fine flavor. I have five varieties but Dorsett and Fairfax beat them all in flavor. As people get acquainted with these two berries they buy them and pay a little more in preference to any other strawberries."**—J. H. Sandy, Augusta Co., Va.

**"Our Dorsett and Fairfax this season gave us the largest crop of quality berries we have ever grown. We had no trouble to sell them wholesale or retail. Obtained 20¢ to 25¢ per quart for many of ours on Lancaster market when others were selling 7¢ to 10¢ per quart."**—Mr. H. Wilbur Heller, Lancaster Co., Pa.



**FAIRFAX—Size, quality and appearance make them easy to sell.**





**Premier—Has Not Missed a Crop in Over 20 Years**

# Premier

Premier was introduced in 1915. It has so many good qualities that it spread in popular favor very rapidly, soon replacing most other early berries except in the far West and far South. Premier is still recognized as the one early berry which any new variety has to surpass in order to become established. For sheer hardiness and persistence in producing a crop every year regardless of conditions no variety, early or late, ranks with Premier. It is a sure cropper, widely adapted and tremendously productive. At their best Dorsett and Fairfax will equal Premier in productiveness and surpass it in quality, size and appearance of the berries. However, Premier will produce satisfactory crops under severe conditions that have cut the production of both Dorsett and Fairfax. We think growers who raise strawberries regularly should try out Dorsett and Fairfax with cultural practices suited to those varieties. The possibilities of them are too great to overlook. However, we think growers who have made money consistently with Premier should continue to grow it for their main crop until others prove superior by actual test. Premier is a grand old variety, well worth the high place given it.

## Vigor and Health of Plant Growth

The foliage growth of Premier is very healthy. In most localities it makes an ample growth for a good fruiting bed. In fact in some places it gets entirely too thick; in others it does not make enough plants. It has been suggested that the wide adaptability of Premier is apparently related to its rather limited production of runner plants, and those produced early in the season. Improvement in yield and grade of Premier berries from proper spacing of plants (see page 4) will probably not be as marked as with freer growing varieties like Dorsett, Fairfax and Blakemore, although we believe some attention to spacing the plants will pay even with Premier.

## Size and Productiveness

Year after year under all conditions Premier is probably the most productive variety ever introduced. Under favorable conditions Dorsett and Fairfax, as well as Catskill and Aberdeen, will equal or surpass Premier in total quarts per acre. With Premier, so many berries are set that in a dry season, especially where hard frosts have not reduced the set, the average size toward the last end of the crop run down much faster than Fairfax or Dorsett.

## Color and Appearance

Premier berries are a medium red in color, getting quite dark as they get riper. They have a medium size green cap which generally stays green throughout the season. They are very

handsome in appearance, and show up well in the package.

## Firmness

Premier berries are moderately firm. They will hold up for local market and shipping considerable distances by truck. They go down very quickly when shipped under ice. They are not as firm as Blakemore, Bellmar, Missionary, or Klondyke. Fairfax and Dorsett are both much firmer and in home garden or commercial planting will stand up in a fruiting season that is very wet or very hot much better than Premier.

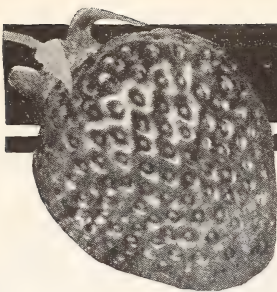
## Quality

Premier berries are of good quality. They rank up well with most of the old standard varieties, but are not quite as good as Wm. Belt or Chesapeake. They are far inferior in this respect to Dorsett and Fairfax, but for markets where quality is not considered they sure do produce the quarts.

## Resistance to Frost Injury

Here is where Premier stands supreme. Not since 1915, when it was first introduced, has Premier failed to give at least a fair crop regardless of frosts or freezes. Premier seems to be practically frostproof and on this account alone it will continue to be grown in many sections for a long time. Probably not in fifty years has there been a year like 1934, which would give Premier a chance to prove that in resisting late frosts and freezes, if in no other way, Premier is superior to Fairfax and Dorsett. Price list, page 33.





# BLAKEMORE

**EARLY  
SOLID • PRODUCTIVE  
A Great Shipping Berry**

**BLAKEMORE** is a U. S. Dept. Agr. cross of Missionary and Premier. Throughout the middle and southern states probably no other new variety has ever been adopted so quickly by leading commercial growers. Large acreages have been planted throughout the South in the territory where Klondyke and Missionary has been the leaders. In a few places north of the Mason and Dixon line Blakemore has done very well. It is thought that if proper spacing were practiced it would do well more generally in Pennsylvania and states of similar latitude. Some of the reasons for the tremendous increase in popularity of the Blakemore are listed below.

**Growth.** Blakemore makes a vigorous, healthy growth. In fact it will make more plants than any leading variety on our list, except possibly Dorsett, under a wide variety of soil conditions. The foliage is healthy and stands up well throughout the fruiting season.

**Productiveness.** Blakemore is sufficiently productive. There are a few varieties which are slightly more productive, but Blakemore ranks very high in this respect. In 1933 our trial plots yielded at the rate of over 10,000 quarts per acre.

**Firmness.** The berries are very firm and will stand shipping long distances and go into market in excellent condition. This factor is important when shortage of help or unusually wet weather delays picking. In dry years especially, Blakemore berries will hang on the vines several days in good condition. Even in wet years they stand up better than most of the others.

**Size and Quality.** In average size, Blakemore berries are somewhat smaller than Premier and considerably smaller than Dorsett and Fairfax. The eating quality of the fresh fruit is rather tart, but it is very well liked by the cold pack men and for canning and preserving.

**Color and Attractiveness.** Blakemore berries are very light in color and rank 100 in attractiveness. They are very pretty and usually sell well.

## Cautions

On good soil Blakemore makes far too many plants. They must be thinned severely for best results. In dry years especially the small thickly set plants will produce berries disappointingly small if thinning has not been done. As noted on Page 14, four to six plants per square foot of matted row is plenty. All over that are weeds which detract from the total yield, average size and market value.

## Yellows

The biggest criticism of Blakemore is on account of the yellow leaves, areas of which occur in all Blakemore plantings. It has not been serious enough to materially reduce the plantings but it is a problem. The originators are not yet sure whether it can be selected out or whether it is inherent with the variety. Our plant fields of Blakemore have been gone over carefully and all plants showing yellow or mottled leaves have been dug and removed from the field. We do not claim that yellow areas will not appear in fields set from our stock, but we do believe they will have less of it than plants of this variety from most other sources. Blakemore in the South, like Premier and Dunlap in the North, can take a lot of punishment and still come through with profitable crops. Price list, page 33.

## Bellmar

Bellmar is a cross of Premier and Missionary originated by the U. S. Department of Agriculture. We have grown Bellmar for several years. Bellmar makes a plant growth somewhat larger and stronger than Premier, though under unfavorable conditions it perhaps does not hold up quite as well. The plants are quite productive in most of the area to which it is adapted and under some conditions it produces very heavily. Very high yields have been obtained in Connecticut, New York and in some parts of the middle West. The berries themselves are rather long and conical in shape with a very large green cap. This makes them very attractive. The berries are a bright red color when picked at the proper time, becoming fairly dark red a little quicker than Premier. The berries are better in quality, firmer, hold their size about as well and usually sell about with Premier. It is worth trying in most of the Premier territory and possibly slightly farther South. Bellmar is a worthwhile new variety and would become more prominent if Blakemore, Dorsett and Fairfax, all early, had not come out so soon following Bellmar. Except under special local conditions we believe they will all prove more profitable than Bellmar. We have some nice plants of this variety for those who know and like it or who want to give it a trial. Price list, page 33.

glossy red berries with an attractive green calyx. With us it makes a strong vigorous fruiting bed but the foliage does not stand up, nor do the caps remain green. Well worth trying in the North but not recommended for regions further South than Pennsylvania. Culver is better and Catskill far better in this latitude than any others of the New York Station seedlings, most of which rust badly this far South. Price list, page 33.

## Howard 17 (Premier)

This variety is identical with Premier and the same description applies. Many growers feel that Mr. Howard, who originated this variety, has not received the credit due him for it, but the facts are that it was introduced as Premier and advertised extensively under that name, so that most growers, except in New England, know it and buy it as Premier. For full description see Premier, page 21. Price list, page 33.

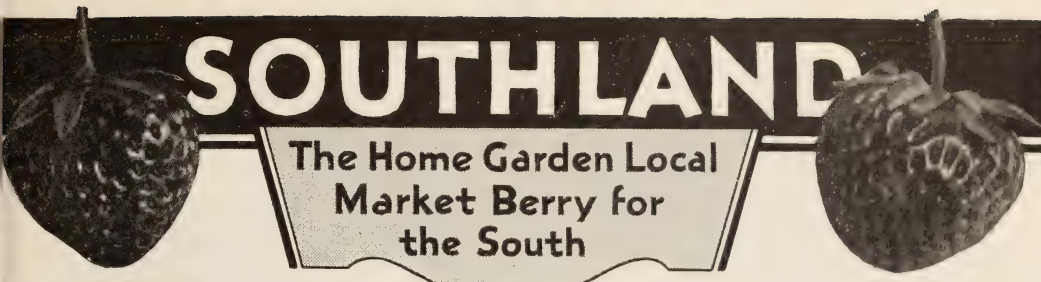
## Klondyke

The leading market berry in many sections of the South. Uniform in shape, medium size, light in color, and an excellent shipping berry. Plant growth is vigorous but only medium in productiveness. Berries ripen evenly all over and this, with the uniform shape and firm texture, has made Klondyke a favorite with canners and preservers. We believe Blakemore to be superior to Klondyke in every particular. However, if you want Klondyke plants we have some good ones. Price list, page 33.

## Clermont

A New York Station seedling of Marshall and Premier. It has been highly praised in some sections of the North. In New York state it bears a heavy crop of large, smooth, bright





# SOUTHLAND

The Home Garden Local  
Market Berry for  
the South

**SOUTHLAND.** This variety was introduced by the U. S. Dept. of Agr. in the spring of 1932. Its behavior since that time has emphasized the fact that it is the first really good home garden berry the South has ever had. Fairfax and Dorsett may prove valuable in many of the higher elevations in the South, but probably will not be as good generally as Southland. In Eastern North Carolina Southland makes a larger, more vigorous plant than Blakemore, Dorsett or Fairfax.

The berries are unusually large and very fine in quality. Most southern varieties, like Missionary, Klondyke, Blakemore and others are not of high dessert quality. There should be a place for Southland as the home garden berry for all sections from North Carolina south. Even as a local market proposition it seems almost certain that the people in Southern towns and cities would appreciate and pay for very considerable quantities of berries that have the size, appearance and quality of Southland.

One rather surprising fact about Southland has shown up in the last two years. From Virginia through North and South Carolina Southland is one of the earliest varieties. From middle Georgia through Florida Southland ceases to be an early berry and comes into bearing some time after Missionary, Klondyke or Blakemore. Despite this fact we believe that in many communities of the South Southland offers an opportunity not only to enjoy better strawberries than ever before but to start also a profitable business supplying fancy, large, high-quality berries to local markets.

Recent experience seems to indicate that the susceptibility of the early Southland blossoms to injury by late frosts makes it inadvisable to plant this variety farther North than Virginia except for tryout purposes.

In the spring of 1933 we planted an acre of Southland and grew some beautiful beds. The winter of 1933-34 was very severe and probably was the main reason why our total yield from this acre was not over 2,000 quarts. However, we carried over this acre for a second crop and in the spring of 1935 picked well over 7,000 quarts of fine berries. It was a very profitable acre.

Shipments of berries have been made successfully and profitably from North Carolina to Washington. The berries are quite firm in flesh and will stand up for some time, but must be handled very carefully as the skin is tender. No variety makes a healthier, more vigorous, disease-free foliage than Southland and it stays greener all winter than any variety we have on our list. Price list, page 33.

## Other Early Varieties

### Missionary

Leading berry in Florida and popular in other Southern States. Missionary will do well on almost all soils, but will do better than most on the lighter soil types. The berries are medium in size, dark red in color, rather tart in quality and attractive in appearance. It is a very good shipper and also a favorite with the "cold pack" or "juice" men. We believe that Blakemore will prove better than Missionary in all the Missionary territory except Florida, where Blakemore in many cases is not living up to early indications of superiority over Missionary. Price list, page 33.

### Narcissa

Released in 1933 by the U. S. Dept. of Agr., it is a seedling of Howard 17 and Royal Sovereign, the same parentage as Dorsett and Fairfax. It has not been tested widely in the east, but is said to be showing up well in the Northwest. Narcissa makes as many plants as Dorsett and Blakemore. It is thought that this

variety will prove valuable in the east where plants are kept well spaced with runners restricted to four to six plants per square foot of row. In quality the berries rank about with Fairfax and Dorsett. Berries rather small under thick row conditions but worth trying on account of the vigor of the plant and quality of the berries. Price list, page 33.

### Senator Dunlap (Dr. Burrell)

An old standard variety that has been widely grown in the middle and northern states for many years. It has partly been replaced by Premier because Premier berries are larger, better quality, and more handsome in appearance. Dunlap is still grown by many of its old friends and we have a nice stock of plants for those who know and want it. Berries are medium in size, bright rich red clear through, and fair to good in quality. Excellent for canning. Price list, page 33.





## Catskill Largest and Most Productive

**3 Acres — 32,000 Quarts — \$3,500.00**

Our results in fruiting Catskill in 1935 were very fine and profitable. As indicated by the legend, a three-acre field of our Catskill in 1935 produced 32,000 quarts of berries, which were shipped mostly to Philadelphia and New York, and returned us about \$3,500.00. The average selling price was slightly above 10¢ on the wholesale market. When all freight, commission, picking, crates, fertilizer, labor and growing costs are deducted it still left a net profit of around \$400 per acre, which we consider very satisfactory. We doubt if this record for yield of marketable berries has ever been equaled in this section with a midseason variety.

Catskill is an introduction of the New York Experiment Station. We have been watching it since 1931. It is a cross of Marshall and Premier.

It is a strong vigorous grower, making lots of plants which are large but produced in such numbers that under good growing conditions they will need thinning. Foliage is healthy with some leaf spot but not enough to be a factor. In production, Catskill ranks at the very top. In actual tests for two different years it out-yielded anything we had regardless of season. The berries average very large in size, as large as Big Joe, even though it is considerably more productive than that variety. The berries are lighter in color with a bright green cap, which makes them very attractive in the package. They retain their light color to a marked extent even after they become ripier. Many of the larger berries are inclined to have a rather rough, uneven surface, but their size, color and brightness make them very attractive. In quality the

berries are good, fully as good as Premier but not equal to Dorsett or Fairfax. In general we consider Catskill the most valuable midseason berry we have ever grown. We gave it a very wide distribution in small lots in the spring of 1934. Report of the behavior of Catskill indicate adaptability almost as wide as Premier. These reports come from seventeen different states. Most of them east of the Mississippi and north from Maryland, Virginia and Kentucky. It is doubtful if any variety, even Premier, has made a more consistently good record over such wide territory in its first year. It seems safe, therefore, to recommend Catskill very strongly as a midseason to late berry throughout the middle west, as far south as Virginia (perhaps further south in the higher altitudes) and as far north as New York and Massachusetts. On the opposite page we are making brief quotations from some of the reports which we received about Catskill. Our Catskill plants are fine. Price list, page 33.



## Catskill Comments

### It May Be the "Money" Berry for You

"—Outyields anything I ever raised. Berries larger than Premier, Big Joe or Aberdeen."—Mr. T. P. Jones, New Haven Co., Conn.

"—very productive, and I did not have any imperfect or small berries on my Catskill plants. Quality good but not equal to Fairfax."—Mr. Oscar S. Smith, Green Co., Ill.

"—largest berries of all tested. In quality second only to Dorsett and Fairfax but we believe they may prove even more profitable than those varieties."—Mr. Roy Gish, Jasper Co., Ind.

"—excellent in quality, attractiveness. Nothing I raise can compare with them for size. Marketable to the last drop. They produce beyond my fondest hopes. Excellent in quality and flavor as well as in color and attractiveness. Shall throw out some of my old favorites to make room for more."—Mr. F. E. Root, Essex Co., Mass.

"—more productive than Big Joe. Every berry nice size. No runty ones. The first Catskill we picked here the largest berries we have ever seen. They held up well and made a big hit with the buyers on account of their size and attractiveness. Average price \$2.30 per case of 16 quarts."—Mr. John Redamak, Berrien Co., Mich.

"—larger and better quality than Big Joe, but not quite as firm. Very productive, second only to Dorsett. Would have done better if plants had not been over-crowded in the rows."—Mr. L. S. Archibald, Somerset Co., N. J.

"—Good crop, large size, sold for good price. Expect to continue growing them."—Mr. George W. Brooks, Orange Co., N. Y.

"—my Catskill berries ran large to medium. No small ones. Lasted even after Chesapeake were done. Keeping quality very good. Did

not lose a berry from mold while other varieties nearby had a loss of 25%. Shape not so good but glossy bright red color made them sell. 15¢ per quart wholesale; 18¢ per quart retail."—Mrs. Philip Gellweiler, Nassau Co., New York.

"—from this year's trial I consider Catskill the best midseason variety, more productive than Big Joe or Aberdeen, equal to Dorsett and Fairfax. As large as Big Joe and firmer. Good quality but not as good as Fairfax or Dorsett. I believe it will pay."—Mr. Rex Fuller, Lawrence Co., Ohio.

"—produced 59½ qts. from 32 Catskill plants set in 1934. In my test plot only Aberdeen equaled it, but Aberdeen leaf spots so bad that I lost two crops out of three. Catskill is far better in flavor, appearance and foliage. Catskill not as good flavored but believe it a better money maker than Fairfax and Dorsett. My planting next year will be Dorsett, Fairfax, Catskill and Premier."—Mr. Harry E. Graver, Carbon Co., Pa.

"—sold all my Catskill at 25¢ per quart. Berries largest of any. Will grow Fairfax, Dorsett, Catskill and Gandy."—Mr. E. F. Genter, Montgomery Co., Pa.

"—In point of salable berries they rate as follows with me: Catskill 98%; Big Joe 60%; Aberdeen 50%. Fairfax and Dorsett, early, and Catskill, midseason, are the three best berries on the market today."—Mr. J. R. Frantz, Dauphin Co., Pa.

"—Catskill very productive. Yield 64 quarts from a 35 foot row. Sold our Catskill and Dorsett at 25¢ per quart when stores were selling other varieties at 10¢. Will continue growing Catskill and Dorsett, eliminating Chesapeake."—Mr. R. D. Michael, Montgomery Co., Va.

# BIG JOE



**BIG JOE** has been the leading midseason variety for years although not as widely adapted as Premier. Many growers consider Big Joe their most profitable berry, coming in with fine, large handsome fruit just as the early berries are beginning to run down. Mr. C. M. Hollingsworth of Vanderburg Co., Indiana, says, "I got better than market price on all four kinds of berries purchased from you, but got by far the best returns on Big Joe possibly owing to being planted in better moisture holding soil than the other three kinds." The plant is a vigorous grower, very healthy and productive. The berries are large in size and have a large bright green cap which increases their attractiveness. They are also very fine in quality. There is one reason why Big Joe is not more universally popular. Where late frosts at blooming time are the rule, Big Joe berries are likely to be knotty, the blossoms often coming through and developing a berry with a green tip rather than being killed outright. As a midseason berry the leadership of Big Joe is being challenged by Catskill. Those who have not found Big Joe at its best would do well to plant Catskill. Even those who have found Big Joe good may find Catskill still more profitable as a midseason berry. However, old favorite varieties like Big Joe are not replaced quickly. We have a fine stock of plants for those who know and like it. Price list, page 33.



## Other Midseason Varieties

### ABERDEEN

Aberdeen is one of those varieties that growers either swear by or swear at. When grown under favorable conditions it makes a very rank growth of strong, healthy plants with no trace of disease. The plants are as productive as any variety we know of and the berries average large in size. They also have a light color which helps the sale on most markets. When the season is favorable with just enough rain to keep the crop developing properly and where there is a good market close by Aberdeen has been a money maker. When the season at fruiting time is very wet Aberdeen berries rot badly. When it is very dry the foliage does not stand up sufficiently to protect them and they will scald badly in hot suns. When hot suns follow showers in the day time this scalding is very bad. Aberdeen will not do at all south of Pennsylvania, as the berries are too soft for shipping and sun scald or rot gets the crop too many times.

Some of the faults which we have found are not likely to be as serious further north. When grown right it is an attractive berry in the package, and if put on the market promptly generally does well. Some of the best growers of Aberdeen say that it is a clay ground berry which should not be grown on light soils. A prominent New Jersey grower with whom Aberdeen has been the most profitable berry for years says, "When Aberdeen first colors, the flesh is of light color and every little bruise shows through the transparent skin. Let it hang for a day or two longer and the bruises are not so evident, and the flavor is also much improved. We rarely find a rotten strawberry in our Aberdeen patch. The chain stores pay us a premium on the Aberdeen in spite of the fact that they do not stand refrigeration very well." Aberdeen generally makes a nice looking plant and this year is no exception. Our Aberdeen plants are fine. Price list, page 33.

### Culver

Another New York State introduction. Does better here than any of the other New York State varieties except Catskill. The plants are very vigorous and healthy and the berries are large,

beautiful red color with bright green caps. Our small test showed the berries to be fairly firm, considerably darker in color than the Clermont, and red to the center. Culver is certainly worthy of a trial. Price list, page 33.

### Glen Mary

An old standard variety, well and favorably known to many strawberry growers in the North. Not recommended generally but for those who know and like it we have a nice stock of plants. Price list, page 33.

### Marshall

One of the oldest varieties now being grown. Has always been known as a fancy garden berry, rather hard to grow but well worth the effort. However, with both Dorsett and Fairfax easy to grow and better quality, why grow Marshall? Still, we have some good plants if you want them. Price list, page 33.

### Red Heart

A development of the U. S. Department of Agriculture. Introduced in 1932. The plant makes a vigorous, healthy growth in summer and fall. In most places in the east the foliage in the spring is subject to disease and will not stand up through the fruiting season. It is recommended primarily as a canning berry for the Pacific Northwest. The berry is the firmest of any variety known, being even firmer than Fairfax. They are rather tart, which makes them desirable for canning and preserving, and are of a deep, rich red clear through. Price list, page 33.

### BEAUTY

We have seen some excellent crops of Beauty. The plants and foliage in the summer and fall make a strong, vigorous growth. The new growth in the spring, however, is somewhat subject to leaf diseases and does not hold up as well as it should during fruiting season. Under favorable conditions the berries are real beauties, perfect in shape and with lots of gloss and shine. The berries are light in color and the flesh is very pale, although of excellent quality. With us Beauty is quite susceptible to damage by unfavorable conditions, either too wet or too dry. Also subject to sun scald by hot suns. It should not be planted farther south than Pennsylvania. Price list, page 33.

## Late Varieties

### Aroma

One of the best late shipping berries. Grown in large acreages in Missouri, Kentucky and Tennessee. A vigorous grower, making lots of small plants rather than smaller numbers of strong plants. Spacing and fall fertilization would probably increase yields of Aroma. Berries are light in color with a bright green cap and very attractive in the package. They will ship long distances and go to market in practically perfect condition. We have a nice stock of Aroma plants. Price list, page 33.

### Big Late

This variety makes a strong, vigorous, upright growth and an ample fruiting bed. Under unfavorable conditions it does not always stand up sufficiently well to mature its entire crop of berries. We feel that it is most valuable north of the Mason and Dixon Line. The berries are very beautiful, being light in color, with a bright, shiny, red surface, and prominent yellow seeds. The berries are very fine in quality, but the blossoms are somewhat tender. The flowers are imperfect. Under favorable conditions Big Late yields are very satisfactory. Price list, page 33.



## The ARISTOCRAT OF STRAWBERRIES

# CHESAPEAKE



In our 51 years' experience in growing strawberries and strawberry plants very few things have given us more satisfaction than being the introducers of Chesapeake. It is not an easy berry to grow but where it does well Chesapeake is the best late berry yet introduced. We have seen and grown some very fine crops of Chesapeake and they always bring the top of the market. Perhaps one of the reasons that Chesapeake berries are so large and hold up so well is because it is a shy plant maker and plants are seldom overcrowded in the bed. However, we believe that even with Chesapeake some attention to spacing plants and fertilizing them heavily in late summer will be well worth while. Below are some of the reasons why Chesapeake has held its place for so long as the most popular of all late strawberries.

**Size.** The berries are very large and hold their size well to the end of the season. In this respect it is the best late berry known. Unlike many other leading varieties, Chesapeake sets only moderate numbers of fruits, and for this reason it is able to size up practically every one to a good marketable size.

**Quality.** Chesapeake is unsurpassed in quality among the midseason and late strawberries, and is equaled only by two or three like Wm. Belt and Big Late. Occasionally a staunch friend of Chesapeake will insist that the quality is just as good as Fairfax or Dorsett.

**Firmness.** The berries are firm enough to stand shipment to distant markets. Carload lots at commercial shipping centers have for years sold for consistently higher prices than other large late berries.

**Growth.** To get sufficient plants for a good fruiting bed, Chesapeake needs land that is well manured, and needs good care. Frequent cultivation and hoeing are a big help in growing Chesapeake, as this helps keep the plants growing all the time without any checks. Given good manure and good care, Chesapeake usually responds with a nice, well spaced fruiting bed, especially where plants have been set early.

**Healthy Foliage.** This is essential for profitable crops. Chesapeake makes plenty of strong, vigorous foliage which maintains its health and vigor through the fruiting season.

**Frost Proof.** Chesapeake and Premier are both practically frost-proof. Premier withstands frost by its very hardiness, and the abundance of its bloom. Chesapeake escapes frosts by its habit of late blooming. It must be admitted, however, that in regions far north where winters are extremely cold, Chesapeake needs winter protection. This was shown in some instances by the short crop in 1934 and 1935, following two very severe winters.

**Profit.** In sections where Chesapeake is adapted it has been for many years the most profitable late berry. The extra price which it brings is on account of the size, quality, firmness and appearance of the berries. While quite productive, Chesapeake does not bear as many as some of the other varieties, but the extra price usually makes the profit as much or more. We have some very fine beds of Chesapeake this season, so good that they rather contradict the theory that Chesapeake does not bed well. Price list, page 33.

## These Growers Like Chesapeake

### A Wonderful Berry

"—The Chesapeake sure is a wonderful berry. I set 100 of your plants in the spring of 1933 and last year I picked 98 quarts. The other kinds I had were Premier, Big Joe and Mastodon."—Mr. Maynard Farley, Hunterdon Co., N. J.

### Chesapeake Fine

"—I had a wonderful crop of berries although we surely had a bad drought last year. Your plants were great. Howard 17 sure is a wonder. Chesapeake fine. Mastodon fine."—Mr. W. F. Growlitz, Fulton Co., Ill.

### 250 Plants—300 Quarts

"—two years ago I set 250 of your Chesapeake plants and picked 300 boxes of berries from them. I have tried other plants but always come back to yours because they give me better results."—Mr. W. E. Young, Northampton Co., Pa.

### Chesapeake Plants All Grew

"—the 8,000 Chesapeake and 8,000 Premier plants were received in good condition and planted in March. I scarcely lost any of the plants. They were certainly healthy and have made a fine stand for bearing next spring. I have bought from you before and your plants have always been as represented."—Mrs. Florence B. Hall, King George Co., Va.

### Chesapeake Fills the Bill

"—Your Chesapeake seems to fill the bill on my soil and methods. Outsold even Dorsett and Fairfax and gave a surprising yield of good size, very firm berries."—Mr. W. E. Daly, Berrien Co., Mich.



## Other Late Varieties

**Gibson (Parsons Beauty)** An old favorite in many strawberry-growing sections. Plants very productive, berries very good in quality and excellent for canning. One proof of its worth is the fact that it has been used so much as a standard of comparison with so many varieties which have been newly introduced. Price list, page 33.

**Haverland** A fine old standard variety, handicapped by imperfect blossoms. However, they are very hardy and Haverland ranks very high in productiveness. Berries are large, long conical in shape, light in color and firm enough for market if kept picked closely. Price list, page 33.

### LUPTON

Lupton is a fancy late shipping berry very profitable with many growers. It usually makes plants freely. Some attention to spacing and late summer fertilizing with nitrogen fertilizers would pay with Lupton. The plants are very productive when grown on good strawberry soil. The berries average very large and are very pretty, resembling Chesapeake in many respects and being just as good as a shipping berry. In quality they are somewhat tart and quite dry. This fact, however, probably helps explain why they ship so well. It is not considered a high quality berry, but its size, condition and appearance make Lupton a profitable berry for market purposes. It is grown largely in New Jersey, also in Delaware, Maryland and Pennsylvania and other eastern states. Lupton is also sold as Town King, although if bought under that name the plants usually cost more. Price list, page 33.

**New York** This is the sweetest strawberry grown. The plant is a vigorous grower, producing a moderate number of large, healthy plants. The berries are medium to large in size, dark red in color, but only moderately firm in texture. New York is a home garden berry. It is the only strawberry we know of that is sweet before it gets red. We have many calls for New York from those whose health does not permit them to eat berries which are in any way tart or acid in quality. Price list, page 33.

**Sample** An old standard variety still popular in many sections of the middle and northern states. Plants are vigorous growers and very productive. Berries are uniform in shape, medium to large in size, of good flavor and attractive in appearance. Blossoms are imperfect. Pollenize with Aroma, Big Joe, Gibson or Dunlap. Price list, page 33.

### WM BELT

This variety has long been the standard of excellence in quality for all varieties and still remains such for all late varieties. There seems to be little question that the new early berries, Fairfax and Dorsett and Southland, have a richer, fuller flavor even than Wm. Belt. On most markets the size and appearance determine the selling price, but where quality is counted in addition to large size and handsome appearance, Wm. Belt should be grown as a late variety. The berries average large in size, somewhat irregular in shape, but they have an attractive cap and the berries themselves are a bright, glossy red, which makes them very handsome. This variety does its best in the middle and northern states, and is fine in the garden for local market or nearby shipping. For quality in late berries set Wm. Belt. We have some fine plants. Price list, page 33.

## Very Late Varieties

**Orem** The latest berry we have. Berries average large in size, fairly good quality and nice appearance. They often sell well because they come after other fancy late berries are past their prime. Price list, page 33.

**Pearl** Like Chesapeake, this variety blooms late and escapes frost. Pearl makes plants so freely that it often needs thinning. However, for fruiting Pearl needs rich, moist ground and liberal applications of nitrogen and phosphorous fertilizer in late summer. The season is very late. Our stock of Pearl came from Michigan growers who praise the variety very highly. Also with us it resembles Gandy very closely, and like Gandy it often brings top prices on the market. Price list, page 33.

### GANDY

A fancy late shipping berry, large, solid, handsome, moderately productive. Needs liberal fertilization. Berries often sell with Chesapeake. Makes plants freely but needs springy land for big crops. Gandy is an old favorite which many growers refuse to give up. Where it does well it is a real profit maker. We recommend limiting of Gandy plants in the row to four to six plants per square foot and fertilizing in late summer. Gandy needs moist conditions for best results anywhere and with this treatment on moist soil or under irrigation Gandy would probably surprise even those who know it is a fine old berry. Our Gandy plants seem unusually vigorous this year. Price list, page 33.



# Facts About Everbearing Strawberries

1. **They do bear out of regular season,** enabling you to enjoy luscious strawberries throughout late summer and fall.

2. **No long wait is necessary.** If plants are set in April you can start picking in late August, only a few weeks after the plants are set.

3. **Extra crops.** In addition to the crop the first fall, a regular crop is produced in the spring season. Under good conditions (especially irrigation) a partial crop can be had the second summer.

4. **Everbearers as a cash crop.** Increasing numbers of growers are finding it profitable to grow Everbearing strawberries, most of them not in any extensive way but as just another cash crop to bring in a few hundred dollars extra, or in the garden or small plot to help make a profitable use of spare time. Up to the middle of November, 1935, we had made shipments from several acres of Gem, Green Mountain, and Wayzata and had received a net return of over \$300.00 per acre for all of them. Nothing remarkable, but very interesting when you consider that they were grown in matted rows for plant purposes with no special treatment, and that this amount had been received within about seven months from the time plants were set.

## Yields of Everbearers From Different Planting Systems in Fall 1935

Matted row ..... 37½ pts.

Spaced row with plants 7 in. apart... 51½ pts.

Double hill row with plants 11 in. apart—plants set in April, 22 in. apart with 3 new runners from each original plant ..... 68½ pts.

Double hill row with plants 12 in. apart—all plants set in April and all runners removed.....103½ pts.

These are totals from our trial plot for five different varieties, Mastodon, Gem, Green Mountain, Wayzata and Empire All Red. The same ranking in yield for the different systems held for all five varieties. It is probable that a single hill row or a straight hill system with rows closer together would equal any other system in total yield. Under the hill system cultivation and hoeing as well as removal of blossoms and runners would be somewhat easier. For small gardens especially, the hill system with all runners removed and plants set fairly close together is recommended.



**Five Varieties of Everbearers Growing in Double Hill Rows. All the Plants were Set Early and all Runners were Removed. This System Requires more Plants but Total Yields were Greater than with Any Other System on all Five Varieties.**



**This lot of Gem sold for 20 cents per pint on a wholesale market. Where shipments can be made by truck we have found the 15-pint flat, with no covers, a profitable package for marketing Everbearers.**



# MASTODON

The Most Popular  
EVERBEARER

Mastodon is still the most popular and widely grown Everbearer. It is the variety that has given most general satisfaction in home gardens and also where grown as a money crop. Some of the new varieties are very promising, but for those who do not wish to experiment, Mastodon is safe. It makes vigorous growth, the berries are quite large in size and of good appearance. The quality is good. In addition to its value as an Everbearer Mastodon is a fine spring bearing sort. One of the reasons why Mastodon does so well generally is that it makes a rather large, strong plant which enables it to get the jump on other varieties less robust. Price list, page 33.

"In 1934 I set 250 Mastodon plants. I picked last year 189 quarts that I sold, also about 35 quarts for home use. I have been very successful with the plants even though this is the first time I ever tried to raise strawberries."—Mrs. Lydia M. Wallace, Cumberland Co., Maine.

"The Mastodon plants you sent me were the strongest and finest I have ever seen. The berries were the best ever."—Mr. Charles H. Bregner, Sullivan Co., N. Y.

"Had splendid success with the 2,000 Mastodon plants ordered last spring. I am enclosing order for 10,000 more Mastodon."—Mrs. W. L. Douglas, Big Horn Co., Wyo.

"The 1,000 Mastodon plants bought of you in spring 1933 gave me a bigger crop at higher prices in 1934 than any other kind."—Mr. Joshua L. Northup, Barnstable Co., Mass.

"The Mastodon plants I bought of you furnished berries right up to frost last year."—Mr. E. Langford, Cuyahoga Co., Ohio.

"The 1,000 Mastodon plants you shipped me May 1st commenced ripening about August 1st. I never saw such prolific bearers in my life. I sold them locally at 35¢ per quart as fast as I could pick them."—Mr. J. P. Walton, Providence Co., R. I.

**Champion (Progressive)** The first really good Everbearer. Very fine in quality, very productive, but berries somewhat smaller than Mastodon and some of the newer varieties. No good for the spring crop. Champion is still one of the best for the home garden and probably the best of all for growing in the South. Price list, page 33.

**Empire All Red** A new Everbearing variety from Western Canada where it is claimed to be larger than Mastodon, better in quality, more productive and a better shipper. We have found the quality very fine. With us it is a vigorous grower but not quite equal to Mastodon; about the same in productiveness. We recommend it for trial more especially in the North. Its growth habit makes Empire All Red especially adapted to growing in hills with runners cut off. Price list, page 33.

# GREEN MOUNTAIN

A FINE NEW EVERBEARER  
FOR COLD CLIMATES & HEAVY SOIL

A new Everbearer introduced by the Aiken Nurseries in Vermont. It has made a fine record there for productiveness and profit, producing good crops both in first and second years. The plant growth is very vigorous, making not only large plants but lots of them, so that it requires considerable runner cutting to keep them in hills or even narrow and spaced rows. The berries are medium to large in size, have a bright red glossy skin and prominent yellow seeds, which make them very attractive. The quality is very mild and sweet; the texture is firm and somewhat dry, making them excellent for shipping. In productiveness Green Mountain ranks up well with the other Everbearers, yielding the heaviest pickings during the last few weeks before freezing weather stops the harvest. On heavier soils Green Mountain produced the largest crops of any Everbearer for us in Fall 1935. On lighter soil types Gem and Wayzata were ahead. We consider Green Mountain well worth trying, especially in latitudes from Pennsylvania north. Green Mountain is a patented variety. It is understood when you purchase plants of this variety that you purchase the right to fruit crops produced and to propagation of plants for your own use but **not for sale**. We are selling them under special arrangement with the introducers. Price list, page 33.

Green Mountain berries make a fine appearance  
See picture below (much reduced)





# WAYZATA

A PERSISTENT PRODUCER

One of the finest of the Everbearers. Wayzata makes large, strong plants but very few new ones. This habit makes them especially adapted to growing berries in hills or spaced rows, which is the most dependable way for high yields. Mrs. Philip Gellweiler of Suffolk Co., New York, told us that she picked over two quarts per plant in September and October, 1934. This is a very fine yield. The berries are very high in quality, probably the best of all the Everbearers in this respect. They are also quite firm, a bright rich red in color and very attractive in appearance. For both home gardens and commercial plantings we recommend a trial of the Wayzata. A record of \$2000 per acre, the highest we know of for any Everbearer, was made by a Minnesota grower two or three years ago. In 1932, a dry year, this same grower sold Wayzata berries from 3½ acres for \$3100.55 and this was without irrigation. Many good growers feel that Wayzata will displace other everbearers to a large extent as soon as its merits become better known and larger stocks of plants are available. Price list, page 33.

## Lucky Strike

Under favorable conditions Lucky Strike does well. It is about as productive as Mastodon and equal in quality. Berries average slightly larger than Champion. They are light in color, moderately firm. Plant growth is none too vigorous and does not hold up well under dry conditions. Most of our best reports on Lucky Strike come from the Northeastern States. Price list, page 33.

# GEM

This variety makes a very vigorous plant growth. Unlike Mastodon, which makes large strong plants, Gem plants are usually medium to small. For this reason care should be taken to set Gem plants early and under good conditions. Once started they grow vigorously and make lots of plants. They must be thinned severely for best results. Our records for two years show Gem about as productive as Mastodon in 1934 and considerably more productive in 1935. The berries average large in size, are light in color, very showy and attractive and firm enough to ship. The quality is somewhat tart but fine when used with sugar. They sell for top prices on either wholesale or retail markets. We have had some very fine sales on Gem, Wayzata and Green Mountain shipped in the fall 1935. We suggest the use of pint baskets for marketing Gem as well as other Everbearers, whether shipping, selling locally or at roadside markets. Price list, page 33.

"—The Gem Everbearer is giving us excellent results, far ahead of anything grown in this section judging from appearances to date."—Mr. B. F. Perkins, Broad Cove Garden, York Co., Maine.

"—Sold \$150 worth of berries from the 1,000 Gem plants bought from you in Spring 1935. They are the greatest Everbearers yet originated. I received \$2.25 to \$2.50 for 12 pints all season. They have everything wanted in a summer and fall berry."—Mr. S. M. Thimsen, Hennepin Co., Minn.

"—This spring (1935) you shipped me 100 Everbearing plants. These have proved very satisfactory. I have forgotten the name except that I am quite sure it was not Mastodon. I would like to have 500 shipped next spring."—Mr. Harvey J. Couch, Schuyler Co., N. Y.

Plants shipped to Mr. Couch were **Gem**.

**GEM—Solid and Productive. A Good One to Plant for Profit.**





# Picking the Winners

Early

## Dorsett Fairfax and Premier

The finest early varieties we have seen in our 51 years of experience in growing strawberries. Under favorable conditions they are at least the equal of Premier in productiveness and superior in average size, appearance, firmness and quality of the berries. Plant them for home use and for profit.

The grand old variety with which all other early berries are compared. As a sure cropper under all conditions Premier is still the best of all and there are places where Dorsett and Fairfax will not replace it to any extent. **BLAKEMORE** (light) is a fine early

shipping berry grown mostly from Maryland South although with proper spacing it may do well farther north. **BELLMAR** (dark) is also a fine solid berry, finding many friends both North and South. **SOUTHLAND** is a fine home garden local market berry for the South.

Midseason

## Big Joe and Catskill

The best all around midseason berry except Catskill. A money maker for most growers, fine quality for the home garden. Brings top prices on the market. Where Big Joe is not at its best try Catskill.

Catskill is more vigorous than Big Joe, equal in quality, and average size, superior in productiveness, firmness, and hardiness of bloom. Looks like the best of the mid-season berries. **ABERDEEN** is very productive and popular with some growers in the North. It does best

on heavy soils. Berries are large, light and attractive but quite soft. Keep picked closely, market quickly after picking.

Late

## Chesapeake

**TON** for a large late shipping berry, **WM. BELT** for high quality, **GANDY** (with spacing) for extreme lateness.

The Aristocrat of strawberries. Where it grows well no late variety will surpass it as a profit maker. Equally good for shipping, local market, or home garden. If your soil does not suit Chesapeake, plant **LUP-**

Everbearing

## Mastodon

This variety is the most popular and widely grown of all the Everbearers. Excellent for the home garden and most generally used when planting for profit. **CHAMPION** is fine quality and one of the best in the South. The new **GEM** and

**WAYZATA** and **GREEN MOUNTAIN** are all showing up well and may soon largely replace Mastodon in popular favor. Their strong points are vigor, productiveness, appearance and quality.

**DELIVERED PRICES ON REQUEST**—We hope that berry growers who may be uncertain about transportation costs will send us the list of varieties and quantities they are interested in. We will be glad to quote delivered prices.



# Price List for 1936

Description Page		25 Plants	50 Plants	100 Plants	200 Plants	300 Plants	400 Plants	1000 Plants	5000 Plants
<b>Early Varieties</b>									
22	BELLMAR (Per) .....	\$ .25	\$ .40	\$ .65	\$1.10	\$1.50	\$1.80	\$4.00	\$17.50
22	BLAKEMORE (Per) ....	.25	.40	.60	1.00	1.35	1.60	3.50	15.00
22	Clermont (Per) .....	.40	.60	1.00	1.70	2.40	3.00	7.00	30.00
23	Dr. Burrell (Per) .....	.25	.40	.65	1.10	1.50	1.80	4.00	17.50
16	<b>DORSETT</b> (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
16	<b>FAIRFAX</b> (Per) .....	.30	.45	.75	1.30	1.80	2.20	5.00	22.50
22	Howard 17 (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
22	Klondyke (Per) .....	.25	.40	.60	1.00	1.35	1.60	3.50	15.00
23	Narcissa (Per) .....	.35	.50	.85	1.50	2.10	2.60	6.00	....
23	Missionary (Per) .....	.25	.40	.60	1.00	1.35	1.60	3.50	15.00
21	<b>PREMIER</b> (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
23	Senator Dunlap (Per) ...	.25	.40	.65	1.10	1.50	1.80	4.00	17.50
23	SOUTHLAND (Per) ....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
<b>Midseason Varieties</b>									
26	ABERDEEN (Per) .....	.25	.40	.65	1.10	1.50	1.80	4.00	17.50
26	Beauty (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
25	<b>BIG JOE</b> (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
24	<b>CATSKILL</b> (Per) .....	.40	.60	1.00	1.70	2.40	3.00	7.00	32.50
26	Culver (Per) .....	.30	.45	.75	1.30	1.80	2.20	5.00	22.50
26	Glen Mary (Per) .....	.35	.50	.85	1.50	2.10	2.60	6.00	27.50
26	Marshall (Per) .....	.35	.50	.85	1.50	2.10	2.60	6.00	27.50
26	Red Heart (Per) .....	.30	.45	.75	1.30	1.80	2.20	5.00	22.50
<b>Late Varieties</b>									
26	Aroma (Per) .....	.25	.40	.65	1.10	1.50	1.80	4.00	17.50
26	BIG LATE (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
27	<b>CHESAPEAKE</b> (Per) ...	.30	.45	.75	1.30	1.80	2.20	5.00	22.50
28	Gibson (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
28	Haverland (Imp) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
28	LUPTON (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
28	New York (Per) .....	.40	.60	1.00	1.70	2.40	3.00	7.00	32.50
28	Parsons Beauty (Per) ...	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
28	Sample (Imp) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
28	WM. BELT (Per) .....	.30	.45	.70	1.20	1.65	2.00	4.50	20.00
<b>Very Late Varieties</b>									
28	GANDY (Per) .....	.25	.40	.65	1.10	1.50	1.80	4.00	17.50
28	Orem (Per) .....	.30	.45	.75	1.30	1.80	2.20	5.00	22.50
28	Pearl (Per) .....	.25	.40	.65	1.10	1.50	1.80	4.00	17.50
<b>Everbearing Varieties</b>									
30	Champion (Per) .....	.35	.50	.85	1.50	2.10	2.60	6.00	27.50
30	Empire All Red (Per)....	.40	.60	1.00	1.70	2.40	3.00	7.00	32.50
31	<b>GEM</b> (Per) .....	.40	.60	1.10	1.85	2.55	3.20	7.50	35.00
30	* <b>GREEN MOUNTAIN</b> (Per)	1.50	2.50	4.00	6.50	9.00	11.00	25.00	....
31	Lucky Strike (Per) .....	.40	.60	1.00	1.70	2.40	3.00	7.00	30.00
30	<b>MASTODON</b> (Per) .....	.40	.60	1.00	1.70	2.40	3.00	7.00	30.00
30	Progressive (Per) .....	.35	.50	.85	1.50	2.10	2.60	6.00	27.50
31	<b>WAYZATA</b> (Per) .....	1.50	2.50	4.50	8.50	12.50	16.50	40.00	....
<b>Asparagus Roots</b>									
34	Mary Washington, 1 yr....	.40	.60	1.00	1.70	2.40	3.00	7.00	32.50

500 plants or more of a variety at the 1,000 rate.

All plants f. o. b. Salisbury, Maryland, at prices quoted.

Send us your list and we will be glad to quote delivered prices.

\* Green Mountain plants are bought with the understanding that they are not to be propagated for sale without permission of patent holder.





## Asparagus Roots — Mary Washington

The improved rustproof Mary Washington Asparagus is generally recognized to be the best variety to grow. Leading Asparagus growers say that it starts earlier, produces more and larger stalks, shows a higher rust resistance and will net more money per acre and more satisfaction in the home garden than any other variety.

The roots should be planted in early spring just as early as you can work the land. They should be set in furrows 5 to 7 inches deep with the roots spread out somewhat in the furrow. A good practice is to open the furrow 8 to 12 inches, apply a liberal amount of well-rotted stable manure, well mixed with the soil filling the furrow to 5 or 7 inches deep before the roots are set. They should be covered with about 3 inches of soil until the young shoots start to come through. Then the furrows should be gradually filled in as the young plants grow, until the ground is level. In the garden, set in rows 3½ feet apart, with roots 12 to 15 inches apart in the row; in large commercial plantings rows 4 to 5 feet apart are generally used. Asparagus needs good cultivation, with plenty of manure and fertilizer.

We have a fine lot of strong one year roots which we are confident will give you good results. Price list page 33.

### Instructions to Purchasers

**Terms. Cash with order.** Remit by Money Order, Bank Draft or Cash in Registered Letter. No C. O. D. shipments.

**Packing.** No extra charge made for packing at prices quoted on page 33.

**Time of Shipment.** We ship plants from November 1st to May 1st. See paragraph on page 9, "Time to Set Plants."

**True to Name.** We take every precaution to have all plants true to name and we will refund your money if any prove otherwise, but we will not be responsible for any sum greater than the cost of the plants.

**Late Shipments.** All plants ordered shipped after May 1st will be packed and shipped in best possible condition but at purchasers' risk.

**Our Guarantee.** We guarantee all plants ordered shipped before May 1st to reach you in good condition. If they are found to be otherwise, either through a slip on our part or delay or mistreatment in transit, notify us immediately so that we can refill your order. Any claim for poor condition must be made immediately on receipt of plants as we cannot be responsible for drought, floods, insects, etc., which may affect the plants after their arrival, as these things are entirely beyond our control.

## When to Order — And How to Ship

**Order** as soon as you have decided what varieties and how many you want. **Write plainly**, so that we can get your name and address correctly for prompt acknowledgment of order and delivery of plants. **Be sure to fill in your County on the order sheet.**

**Express** is generally satisfactory and the best way to ship plants if your order is large, or if the distance is great.

**Parcel Post.** Generally cheapest and most satisfactory for small shipments and with larger shipments in adjoining and nearby states.

Strawberry plants packed for shipment weigh approximately 4 pounds per 100 plants. **One-year asparagus roots 8 lbs. per 100.** Make up your order, calculate the approximate weight and if you do not know your zone from Salisbury, Maryland, use distances given herewith, or ask your postmaster. **NOTE** carefully weight of asparagus roots.

With zone rate published here you can easily calculate the amount of postage to send.

**Be sure to send postage enough as any excess will be returned.**

If sufficient amount to pay parcel post charges is not sent with the order, the plants will be sent by Express collect, or by parcel post C. O. D. for the amount of postage due, as we cannot keep accounts and send bills for small items of postage.

Zone	Miles	1st pound	Each additional pound or fraction
1st ....	0 to 50 .....	8 cts.....	1 1/10 cts.
2nd ....	50 to 150 .....	8 cts.....	1 1/10 cts.
3rd ....	150 to 300 .....	9 cts.....	2 cts.
4th ....	300 to 600 .....	10 cts.....	3 1/2 cts.
5th ....	600 to 1000 .....	11 cts.....	5 3/10 cts.
6th ....	1000 to 1400 .....	12 cts.....	7 cts.
7th ....	1400 to 1800 .....	14 cts.....	9 cts.
8th ....	1800 up .....	15 cts.....	11 cts.

**WE HAVE NO AGENTS**—If you want to be sure of getting Allen's plants, order direct from this catalog. Many agents buy their plants where they can get them the cheapest, regardless of quality, and sell them for as much, or in many cases more, than the cost of the best. To be sure of getting **ALLEN'S QUALITY PLANTS** at the best price, **MAIL** your order to us.



## CHESAPEAKE

The aristocrat of strawberries. Outsell all other late berries.



*The* **W.F. ALLEN CO.**  
**Salisbury, Md.**

## BIG JOE

Midseason. The large size, beauty, and high quality of the berries make Big Joe the most profitable mid-season variety for many growers.







## DORSETT

The most profitable early berry we have ever grown. At its best no other equals it, except possibly Fairfax.

## CATSKILL

Fine midseason berry. Our record this year 3 acres — 32,000 quarts — \$3,520.00.

*The* **W.F. ALLEN CO.**  
**Salisbury, Maryland**

